Hunt. 197

A profitable booke

declaring dyuers approoued remedies, to take out ſpottes and ſtaines, in Silkes, *Velvets, Linnen and Woollen Clothes.*

With diuers colours how to die Veluets and Sylkes, Linnen and woollen, Fuſtian *and Threade*

Alſo to dreſſe Leather, and to co- lour Felles. How to Gild, Graue, Sowder, and Ver-**niſhe. And to harden and make ſofte** Yron and Steele.

Very neceſſarie for all men, ſpecially for thoſe *which hath or ſhall haue any doinges therein: With* a perfite table hereunto, to finde all things readye, not the like reuealde in Engliſhe heeretofore.

TAKEN OVT OF DVTCHE, and engliſhed by *L. M.*

EX DONO Bibl. Bodl. R. DOUCE

¶*Imprinted at London by* Thomas Purfoote, dwelling in the newe Rentes. 1588.

314 WH. p. 999.

To make Cloth whiche hath loſt his colour, to returne vnto his firſt eſtate againe.

TAKE OF VNQVENched lyme two ounces, of Dake aſhes two ounces, of cleare water two pound. Then meddle thē well all together, and ſo let them reſt one quarter of an houre, and then doe clariſſie that water, and therewith waſh your cloth, and it will returne vnto his firſt colour and wax faire againe as before.

¶To waſh a ſcarlet which is greaſie.

Take of white tartar well and finely beaten, foure ounces: then boyle it in two pound of layze water, till the thyrd parte be conſumed: then take it from the fyre, and let it coole, and then ſtraine it thzough a linnen cloth, and when you will vſe thereof, make it then milke warme, and waſh therewith your cloth. Then hang it to dzye, and you ſhall ſee it layze, and returne to his firſt eſtate and coloure againe.

¶To make all colours of ſilkes which be ſtainde, to come to their firſt colour againe.

Fyrſt take one ounce of vnquenched lyme, and of the aſhes of a vyne one ounce, alſo of aſhes of an Dake one ounce and a halfe. Put all theſe into a baſen of cleare water, and meddle them all well togither, then heate them a little o-

uer the fyre, and when it is warme, take it of the fyre, and let it clarife a while, fo done, then take a fpoonge and waſh your ſtainie ſpottes therewith, and ſee that ye weat no other place, but the ſpottie places onely, and ſo they will be well againe.

¶To make a ſope to take foorth greace or other ſpots whatſoeuer they be.

Take one pound of roche Allum burned and made into a fine poulder. Alſo take of the rootes cald flames of Florence (ſo calde in Dutche) halfe a pound: then beate it into a poulder. Then take a new layde egge, & of white ſope two pound and a halfe, then blend your poulder, and your egge and ſope altogeather well, and thereof make pellots or bals, and if one egge be not ſufficient, then take two, or ſo much as ſhall ſuffice to make your ſayd paſt withall, and when ye ſhall haue occaſion to take foorth any ſpotte, take firſt of common water and waſh your ſpottes on both ſides withall warme, then take of the ſaid pellots, and rubbe all ouer the ſpottes in the cloth, ſo done: then waſhe out the filth with fayre cleare water and if there remayne ſome part and be not all cleane, waſh it againe as afore is mentioned, till it be all cleane, and ſo ſhall ye haue it as fayre as before.

¶Another good way to take foorth ſpottes of greace out of anye woollen or linnen.

Take firſt a little fayre water, all to weate and rubbe therewith the ſayd greacie ſpottes. Then take a quantitye of walkars claye, called Fullars earth, and rubbe a little therewith your ſpottes all ouer. Then rubbe and chafe your.

your cloth one vppon another, so vone, take a siluer spoone or such like thing, and scrape out the saide filthie water and greace, and if then it bee not all cleane sooyth, doe so agayne as before is mencioned, and then take a little warme water, and all to weate the sayd place therwith, so vone. Then wring and scrape it sooyth as the other afore. Being then cleane, let it be dryde and it will be well.

¶To take away all spottes on coulered Clothes, be they linnen or woollen.

If there chaunce by fortune, to fall a droppe of ynke, or any other staine, vppon any cloth dyed or coloured, or being cleane white, woollen or linnen. Ye shall doe as hereafter followeth, that is: take of the iuyce of rawe Lemmons, or the iuyce of a great Orange Apple, which hath a hard pill or skinne, which the Italion call Pommes Dadam. Or if ye will take onely the egar or sharpe iuyce which is in the pouncitron, and straine it sooyth thereof, and with the iuyce yee shall all to rubbe and chafe the sayde spottye places, and then wash it with luke warme water, and so then scrape out all the filth thereof, with some spoone as aforesaide, or wring it cleane sooyth with your handes. If at the first tyme peraduenture it bee not cleane, vse it likewise againe the seconde tyme, as before, and so your cloth will come vnto as good estate as it was at the fyrst, nor this shall not hurte any colour thereof.

¶Another good way to make cleane spottes of greace, out of all woollen clothes.

Take an hearbe called wood sorrel, or stubwort, which is grrene, & groweth in woods, in bushes & stubs of old trees,

and hath three small leaues lyke a heart, it tasteth sharpe like other sorrell. Which hearbe ye shall distill in a lymbec, and so reserue the distild water in a glasse very close, and when you neede to take foorth any spotte of greace, then take of the distilde water, and rubbe therewith all ouer the saide spotts. Then chafe your cloth one vppon another: so done, take a spoone, or some other lyke thing, & take away the saide filthy water therewith. Then if it be not all cleane, do it likewise againe as before, with the distilde water warmed, and then ye shall see it will doe well, and shew fayre and cleare as it was at the first.

Another good way to take out spottes out of clothes with a lye.

Take three pintes of water, and put therein halfe a pound of pot ashes, and stirre it well altogether. Let it so stande the space of foure daies, but yee must in euery day stirre it three or foure tymes. So doone, poure foorth the cleare water from the ashes, and put of galles therein, then it will wax a greene: but if you will haue it a blacke, then put a little soote to soake in fayre water, and put that blacke water therein. With this warmed, ye maie wash your spottie places in any place of your clothes, and it will take it foorth fayre and cleane.

To perfume clothes.

Take a viall of Rose-water, in the which ye shall put eyghteene or twentie graynes of Muske, and Ciuet, with a little of Ambergreace, then set all on the fire, and when it begins to waxe warme, take it from the fyre, and let it coole, and stoppe it close the space of two dayes, and when yee will perfume your clothes therewith. Set it on the fyre againe, and being warme, holde your Clothes ouer it,

it, and so it shall receiue the fume.

To take out spottes out of gownes and Clothes.

Take the rootes of Limonion, cald in Latine, in English I take it to be the wild Bete. Take the rootes, and seeth them in water, and with the same water, wash the spottie places in your gownes or other garments, and it will bee cleane.

To make a sope to take out spottes of oyle and of greace.

Take of good scowring sope, and mixe it finely with the sifted ashes of a vyne, of eche in like portion, then put thereunto a quantitie of the powder of burnt Allum, and also of the lyes of wine, beaten into a fine poulder, and put it thereunto, then mixe and incorporate all these well together, then make thereof square brickes, or rounde balls, and when you shall haue neede to occupie thereof, then take of warme water, and rubbe and chafe all ouer your spottye places, and then rubbe thereon with your sope ball, if then it bee not all cleane, then must yee take your warme water agayne, and rubbe and chafe it, as yee did before, and then your sope, and so at length ye shall haue it cleane foorth.

A very good waie to take out spottes of oyle out of clothes

First ye shall take of the oyle of tartar, and rubbe therwith on the spotty places, and then scrape it away incontinent againe, then ye shall wash it well with luke warme water, and thrise or foure times with colde water, so then

wring it foorth, and see if all the spots bee cleane out, if not, wash it againe, so long as you did before, and so the cloth shall be as fayre as it was when it was newe, so before any spots came on it. Their is also another waye, for to take foorth spots with this oyle of Tartar, but because I haue not the true knowledge thereof, I will not heere expresse it.

¶ A sope water to take out all spots.

Also, some doe vse to take the water wherein strawberries hath beene sodde, and with that water ye shall weat and soake the spottye places, then take fayre water, and washe out all the filth thereof, so doone: take and hang it in the sunne to drye, and it will bee so cleane as before it was.

A way to take out yron moles, out of all linnen cloth.

Take and wring foorth so much of the iuyce of the sowrest Orange, or Lemmon that ye can get, then take of the same iuyce, and rubbe the place of the yron mole therewith so let it drye, and euer as it dryeth in, rubbe it ouer again, thus doe often, and ever as you haue weat it, let it rest and drye in the sunne, and at length ye shall see it will bee all foorth and cleane.

A way to take out spots in scarlet or veluet, of what colour or sorte so euer it bee, not chaunging the colours.

Take a hearbe (called of the surgions) Saponaria, in frenche called Foullons, in English Sopewort, beat them wet, and take out the iuyce, and put thereof on the spottes, then

then let it so rest the space of one houre if it bee in sommer, but if it be in winter let it rest foure houres, then washe those spottye places with fayre cleane water, so shall it bee cleane to seeme too, but put once agayne the sayde iuyce thereon. Also if the scarlet be not dyde in the cleare graine then ye maye put thereunto halfe of blacke sope, with so much of the said iuice, so mingle it together, and then frete it thereon, then let it be washt in luke warme water, and then ye shall see the spots cleane forth: For this way is prouided by experience to be true.

Another waie to take out iron moles out of linnen.

Make a chafer seeth full of water, then take your cloth and wet it with the iuice of Limons, or sower Dranges, or crabbes, or sower wildings, and then hold it hard to the syde of the chafer, and euen as it driech in, weat it still againe, till ye see the moll go forth: for all these thinges aforesaid are good, but the iuice of Limons and Dranges are the best. Soeuer as ye haue weat your spottes with the said iuice, hold it then hard vnto the syde of the chafer, as is aforesaid, thus doe vntill it weare awaie, for this waie hath beene proued true often. Or take the boyling iuice of Sorrell, and laie it therein, and rubbe it with the backe of a spoone till it be dyde.

How to take out oilie spots out of parchment, or writing paper.

Take a mutton bone and burne it to poulder, then let it be fine beaten, then put of this poulder on both sides of your spots, and let it be prest betweene two hard boordes, the space of two daies, then take it out and yee shall see the oile to be cleane gone, be it either parchment or paper.

An other waye to take out spottes of paper.

Ye shall take off the water willow boughes, and make ashes thereof, or ashes of the buds of the vine, with ỳ husks of greene beanes, steepe them in water a day and a night, then put of the same water on the spots, then presse it, and let it so remaine for a daye and a night, or as yee shall see cause, and ye shall see it will doe well.

A very good waye to take out spottes of clothes.

Take of the twoces of the hearbe called Gentian, in english broome; take and burne of it, and make ashes thereof, and with the ashes make a lie, and with the laid lie, ye shall wash your spotty clothes, and in a short space it will take away all the spots thereof. Well proued.

A good way to take out spots out of woollen.

Take ashe water, and the powder of Allum together, then take of the ashes thereof, and laye it vpon the spottye places on the cloth, and when it is drye: doe sponge it off, and ye shall see it cleane.

An other against staines in linnen Cloth.

First take your clothes and rubbe it well all ouer with baye salte, then take an Orange and cutte it in two, and wring the iuyce thereon, and laye the sayde Orange vpon the spottes also: and so lette it rest an howre or two,

then

then lay them in a bucke and wash them, and they will be fayre and cleane. Or else ye may laie thereon the iuyce of sorrell and salte, and so put them into the bucke as is afore sayde.

¶A way to keepe silke from stayning in the washing.

Take fayre water and seeth it, and being all seething hotte, put thereunto of sope and let it so melt therein, then take it from the fire, and let it coole till it be almost colde, and then at your pleasure yee maye washe therewith your clothes, and it will scoure well, and not stayne your silke, and after ye haue washt them, doe not let them lye weat long together, but laye drye clothes betweene, or else they be in dauuger to stayne: and this waye you maye saue both Sylke and Golde without chaunging of their coloure.

¶An other very good way to keepe Golde from stayning.

Fyrste take your Golde and annoynte it all ouer with good Honye, then lette it in the Sunne, and lette it reste the space of halfe an hower, and nowe and then lette it bee turnde in the Sunne. Then after take and washe it in the foresayde sopye water, and this way it shall neuer chaunge nor staine, but keepe colour long.

¶How to bucke linnen clothes, and to scoure out all spottes of greace.

Firste yee shall laye all your foule clothes to soke

in colde water, then dryue them as you doe a bucke of clothes, and when they are well dryuen: then shall you take them all foorth of the bucking tubbe, then laye them agayne abroade in the saide tubbe, without any lye, and euer as ye lay them betwixt euery cloth: scrape of chalke thinne all ouer, thus when yee haue all layde them: then put of your lye vnto them, and so chaunge your lye twise or thrice after, then take and washe them foorth, and they will be fayre and cleane without greace and very white withall.

¶ A good way to keepe linnen fayre 20. yeares without remouing, and will not waxe moulye nor rotte.

Fyrst take your linnen in marche (so much as you intend to keepe vnremoued) and wash them, and then dry e them faire agayne. So laye them vp in your cheastes vntill May next following: then shall yee take them out and wash them agayne, when you haue so washed them, looke that yee doe then dry e them thorowly and well, and then folde them fayre vp, and lay them in your cheastes or presses, and yee shall not neede for to remoue them in twentye yeares after; yet they shall continue dry e and well.

¶ How to spoonge woollen clothes.

Take a quart of fayre water, and let it be heate luke warme on the fyre, then take a quantitie of walkers claye and all to crush it therin, then let it stand vntill it be cleare, then poure that water into another potte, and set it on the fyre agayne, till it begin to seethe: then take of Uenice sope, or other good sope, and put thereof into the sayd water, in stirring it well about, then take it of the fyre,

and

and all bottle, ſpoonge or occupie therewith at your pleaſure, in making it alwaies warme, euer when you will occupie thereof.

How to make crane colour Fuſtian to be as fayre canuas as at the firſt.

Firſt for the proofe thereof, take a peece of crane colour Fuſtian, and take alſo as much of the iuyce of Orenges, or Lemmons as will weat the ſaid peece thorow, then let it reſt and dryye in, and the ſaid Fuſtian will be as faire canuas as it was before it was coloured, thus if yee can get ſo much iuyce of Oranges or Lemmons for to ſerue your purpoſe, ye maye returne the colour againe, what quantity ye ſhall thinke good, for this hath beene well prooued.

Thinges to keepe moathes from cloathes, very good in ſummer and other tymes.

The flying moathes will bee in the beginning of June, and continue till Auguſt, but they are chiefely from mid July to midde Auguſt. The running moath bee wyll continue in your cheaſtes all the yeare long, wynter and ſummer, which are greate ſpoylers of geare and other thinges. For the flying moath. Take the powder made of dryye Orange Pilles, and the powder of Elecompane rootes mixte togeather, and ſocaſt it among your clothes, alſo perfume in a chafingdiſh of coles your clothes therewith. Thus you may vſe quarterly, and it will ſaue them. Or ye may take the powder of Arras, with the powder of Ginoper, alſo the powder of ſtirinum caſt among clothes ſaues them from moathes. Woormewood or Lauendar ſmall preuaileth. Some vſeth oyle of ſpyke to annoynt their cheaſtes, and hang it in bladders therin. Some laies

the hearbe called Fleawort, in Latin Pulicaris, which if yee lay it in your chamber, no flea will breede. some takes brimstone, & perfumes therewith, but for the running moath I know nothing but strong perfuming, and remouing your geare.

A way for to take out spots out of wollen clothes.

Take and seeth of common ashes in fayre water, and the powder of Allum together, and then take of the sayde ashes and laie thereof on the spottes and so rub it in, then let it drye, and when it is thorowly dryed, then take a spoonge and spoonge it away, as it is declared of the other afore.

¶A good way to helpe all staines in thinne silkes and woollen cloth.

Take of good strong vineger, and make it luke warme, then dip a black cloth therein, and then rubbe therewith your stainie spots all ouer: so done, then take away so much of the sayd filth as ye can with a spoone, as for the reste, ye must haue all ready a taylors yron hote, and lay a peece of blacke clothe on the spottes betwixte the yron and the cloth, and so drye out all the rest of the sayd filth with the hote yron, and then yee shall see it will doe well and bee fayre.

A pleasant water to preserue linnen, or any other thinge, yeilding a pleasaunt sauour a long tyme after.

Take 2. pound of spike flowers, as much of rose leaues, one pound of rose marie, with halfe a pound of marioram,

as

as much as Balnea, two great handfull of Origany or penirpall, foure ounces of mace, a quarter of a pound of Arras poulder, let all these well soke together in red Wyne, then put it all into a pot close stopte that the ayre doe not passe. Let it stande so the space of foure and twentye howers, then let it bee put into a distillitorye, and see that it bee well stopte, (rounde aboute) with flowre, egges, and water, mixte well togeather, and see that no ayre doe come nor goe out, but at the spoute onely. Upon the end thereof, ye shall hang a fine linnen cloth with a graine of muske or Ambergreace, within it, vppon the which ye shall alwaies let the spoute droppe on, and yee shall see it will be a pure water for that purpose, ye shall also take to the distilling of the foresaide thinges, halfe a pounde of baye leaues, so shall this water be good for the purpose as is afore mentioned.

A good way to washe a shirte, and saue the Golde or Silke thereon, from staining.

Take a newe shirte first of all afore it bee euer weat, and laye the collar and ruffes or silke in pisse somewhat warme halfe an houre space, then take it foorth, and then wash him in hot scalding liquer, or seeth him, and it shall neuer staine the silke, If ye haue not pisse, yee maye take grounde of strong beare or ale, and let the silke lye therein, the night before ye doe wash it. And this hath bene oft mooued very true. But alwayes yee must foresee, that ye hang not your clothes in the hotte Sunne, after they bee washte, but laye an other cloth thereon betwixte the Sunne and it, or else the Sunne wyll chaunge both Golde, Syluer and Silke. Therefore it is better to hange them in some place of the shade after their

washing, if yee can. Also to sope your water to much, or youre cloathes is an occasion to stayne bothe Golde and Sylkes. A verie good waie it is first to melt your sope in the lyeour, and then let it coole, and so to washe your cloathes therein.

Against clothes stainde with wine or vineger.

Take of warme Cowe mylke and washe your cloth therein, or washe it in whaie and salt, other elsse as soone as your clothes are so stainde by mischaunce of wine or other thinges, doe cast of salte thereon incontinent, so then it will preserue it from staynings, whether it bee woollen or lynnen.

A very good way to take foorth wax or rosin dropte on silke, woollen or linnen.

Whereas ye shall haue any such occasion to take foorth Wax or Rosine dropt on any silkes, or other clothes. First ye shall make a pressing yron hotte, or some siluer spoone, with a cole of fyre therein, take eyther of them when they be hotte, and first whereas any Rosin or waxe is dropt, yee shall first rubbe on the said droppes of waxe or rosin all ouer with the end of a tallowe candle, then take eyther your yron spoone aforesayde, and holde it thereon, laying a peece of browne paper betwirte your yron and your waxe, then after yee haue a little so touched it with the heate, (the waxe and tallowe will mingle togither, and sooke into the browne paper) then take it off, and annoynt it with the sayde tallowe againe, and then holde your hote yron, or spoone, as before, and thus yee must do, as often as ye shall see cause, vntill it be all cleane forth. If the waxe be dropt thorowe on both sides, vse the one side lyke the other, and so

yee

ye shall get it cleane: and looke euer that you shift your browne paper to a cleaner place, from the place it was before touched with ware, and this order keeping, it shall be all well and cleane. Often proued.

A sope to take out all spottes in woollen cloth.

Take of Uenice sope a quarter of a pounde, the yolkes of three egges, of salte finely beaten halfe a spoonefull, of the iuyce of Betes, halfe a spoonefull, or as much as will make it thicke lyke a paste, then make them into preye balles, and let them drye out of the heate of the sunne, in some shadow place, and whensoeuer ye will occupy thereof, first weat your spots thorowe with fayre cleare water, and then take your ball and rubbe it thereon, and wash it then cleane foorth as is afore mentioned of the other, thus doe, and yee shall see that they shall bee cleane foorth, as before.

Another for the same.

First yee shall take of white sope halfe a pounde, and shread it very small, then take of the gall of an Ore, or of a bee Goate, with some Allum, of eyther of them an ounce, take the yolkes of two egges, with a quantitye of fine sifted ashes, put them altogether in a morter, and beate them, and when they be well mixt, make them into balles, and whensoeuer yee shall neede thereof, take of fayre warme water, and rubbe the place all ouer therewith, and then strike with your ball thereon, and then shall yee rubbe clothe vpon clothe, and washe it then foorth, as afore sayde, and it will be cleane.

Another good way to helpe spots or staines.

Ye shall first take halfe a gall of an Oxe, the older the better, of fenygreke made in fine poulder halfe a pounde, a quarter of a pounde of white Sope, a gallon of stronge common lye, mixe altogether therein, and set them on the fyre, and seeth them softelye till they bee halfe wasted, and whensoeuer ye will occupie thereof, heate it warme, and wash your spotts therewith, in washing it often with faire colde water, and it shall doe well.

How to take out spots of white silkes, or other coloures.

Take of the best and strongest Aquauite, three pintes, with the which you shall wete your spottes, & take a newe layde egge and beate it, and rubbe thereon your said spots, and so set it in the sunne and let it drye in: this done, washe it then with a fresh and cleare water, and then wring or presse the said water foorth, or presse it betwixt your hands, and so they shall be cleane, as for cloth in graine, yee maie wash the spots well with Allum water, then rubbe cloth vnto cloth, and so wash it foorth with cleare water againe, and it will be well. If it be not at the first all cleane out: doe so likewise againe, so long as ye shall see cause of any spots remaine, and so they shall be well.

A prooued way how to take out oylie spottes out of cloth.

Take of the oyle of Tartar, so much as will couer your other staines, and put it thereon, and straighte waye take it off againe, and washe it then well with fayre warme water.

water. Then take cold water also and wash it 3. or foure tymes ouer, after that, in chaunging it still with newe water, this done, you shall see it will be as fayre as the rest and as it was before.

Another way to take out all waxe, Rosin or pitche, on Silkes or other clothes.

First take of tallowe or other greace (be it salt or fresh) and melte it, and beeing seething hotte, put thereof on your fayre spottes of waxe, Rosine, or Pitche, then take of hotte licour, and holde your fayr spottes therin, & then rub cloth vpon cloth, betwixt your hands. So done, then wring foorth the fayr greazye water, and if ye then see it will not bee all cleane foorth, serue it so agayne, annoynting youre fayre spottes with tallowe or greace, and then doe cleanse foorth the greasye water as before is mentioned. For this waye hath beene well and often prooued, and doeth helpe

¶To take foorth greace out of Silke, Veluet, Mocado or others.

Take and heate water and put a hand full of cleane feathers therein, & then let it coole til ye may suffer your hand therein, and lay your silke abroad, and take your feathers & rub all ouer the spot, then rub it ouer with Castile Sope, and then with your feathers againe all vp & downe, weting them twise or thrise, and so rub it vp & downe, then wring it a little & dry it in the sunne or wind: but if it be Veluet, after yee haue so rubbe it: the veluet will lye, then must yee take a cloth of woollen, & heat it, then annoint it light ouer with butter, & chafe your cloth together, to rub in the butter, then heat it a little, & rub your veluet vp & downe therwith, & it will then rise againe, and be as fayre as before.

To take out ſpottes of cloth.

They take the ſtraight bones in ſheepes feete that are ſodde, and dryye them and make them into poulder, with the which you ſhall lay on the ſpotted cloth, layde in the Sunne, and rubbe this poulder thereon tyll it goe all foorth.

To dye wooll red.

Ye ſhall put too foure pounde of woollen yearne, tenne ounces of Allum, and ſeeth it with branne water ſo much as ye ſhall thinke good, then take your yearne out, and put that water out of the kettle, and put therein agayne three partes of freſh branne water, and one parte of fayre cleare water, then warme it a little on the fire, then put therein two pounde of greening weede, and let it ſo warme a while, then put therin your wooll, and ſtirre it well with a ſticke the ſpace of three howers, but let it not ſeeth in any wiſe, ſo done, then take out your wooll againe, and put it agayne into your Kettle, and put thereto halfe a glaſſe-full of vnſleakte lyme, with as much of common aſhes, and thereto put your wooll againe, and ſtirre it with a ſtaffe fire or ſeuen Paternoſter whiles, than take foorth your wooll, and yee ſhall haue a fayre colour. But if yee will haue it yet a more ſanguine coloure, then muſt you putte into your Kettle halfe a little glaſſe full of more lyme, and a little glaſſe full of common aſhes, and thereto put your wooll againe, and ſtirre it well ſtill foure or fiue Paternoſter whiles, then take foorth your wooll and waſhe it, ſo ye ſhall haue a very fayre colour.

Another way to make wooll a fayre red.

When

When as your wooll is made red after the first maner then shall yee cast awaye that licour that is in the Kettle, and put into it fayre water, and put thereto the cruse full of fayre made lye of common ashes, and therein put also an ounce of Allum, then as soone as it beginneth to seeth, put therein your wooll, and stirre it well therein foure or five paternoster whiles, then take it foorth and washe it, and so you shall haue your wooll a fayre colour. This maner of dying is after the order of Dozneke in Flaunders.

To dye a fayre yealowe.

If yee will dye yealow with woode, take off the wood leaues, and cut off the rootes, then cut them in peeces, and lay them to soke in lye of common ashes three houres, then seethe it a quarter of an howre, till you thinke it meetely well sodde. Then put therein two quartes of water, and as much stale Vrine of fiue daies olde at the leaste, so let them seeth together a little, then cleanse it thorowe a siue, and then put vnto the same agayne, of lye and Vrine as aforesayde. Then straine it thorowe a fayre cloth and seeth it, and to two pounde of wood take two pounde of Verdegreace, with the lye that ye haue sodde, your woad and all putting them in your sayde colour, which must bee medled and well stirred all together. Then shall yee boyle it all a little, and it shall be well.

Another colour to dye a yealow with woode.

Take and set a pot with water on the fire, and make it warme, then take ashes made of Oake woode, and cast thereof into the pot with water, and being warme take it from the fyre, and stirre it well. Then couer it close til the

next day. Then poure the cleareſt lye therof thorow a cloth ſoftly into another veſſel or panne, then take of good wood, & breake the rootes off, and then cut them ſmall, then waſh & rence them in cold water, & then put them into the lye, & there let them ſoke a night, then take and ſeethe it, till the halfe be conſumed, and when it is well ſodde, then all hotte cleanſe it thorowe a fayre cloth, then muſt ye haue of verde-greace well and finely beaten into poulder, & blend thereof with a ſpoone amongſt your other ſtuffe, this muſt be done incontinent thereupon, and alſo your lye thereunto muſt be very ſtrong made.

Howe to dye linnen or thread red.

As when ye will dye anye Linnen or threade redde, yee ſhall take one pound of ſamfleure, and let it ſoke halfe a day and a nighte in water milke warme, then put it into a thicke bagge or ſacke, and therein waſhe and rence it in the riuer tyll the bagge bee therewith redde, then wring the water well foorth, and ſo take out your Samfleure, and ſpreade it vppon a fayre boorde or Table and make (as it were) a little thinne bedde thereof, then ſtrawe thereon of white aſhes, in making beddes of your Samfleure, and when yee haue ſtrewde them with aſhes, yee ſhall take to one pounde of Samfleure, a quarter of a pound of aſhes, which aſhes muſt bee burnt and made of the lyes of white Wine, and it muſt bee well chafte betwixte your handes, the one againſt the other, then make therof a ſmall heape, and ſo let it reſt the ſpace of fiue houres. Then ſhall yee rubbe it againe till it waxe warme, then haue readye a fayre baſen, and ſette it vnder your ſtuffe, that it may runne therein, and alſo wring out the iuyce thereof into the ſayde Baſon. Then caſt therein a pinte of wine vyneger that is very good, then yee maye putte therein a pounde of yearne, and it ſhall doe well. But

to dye your Linnen cloth, yee shall put it in before youre yearne or Fustian. Then lay it therein a day and a night, then take foorth your linnen or yearne, and then put therin a gallon of ashes of the Ashe tree, and thereunto your linnen, yearne, or Fustian, and so let it lye therein halfe an houre, then take it once and wring it as well as you can, then by and by hang it in the sunne, then take that water that ye soked first your Samfleure in, and straine it (as afore sayde) into the bason vnto the other colour, then put therein a glasse full of Vineger, and then you may put therin your yearne, fustion, or linnen cloth, and doe therunto as is afore sayd.

Another way to dye Linnen in a fayre rose redde colour.

To dye a fayre reede rose colour of Linnen, yee shall take to euery 3. pardes and a halfe of Lynnen, halfe a li. of good gal nots, and seeth them in fayre water all whole, the space of 2. houres, then take it from the fyre, & poure that water into another vessell or paste, then put your linnen into the sayde water, and let it soke therein the space of foure houres, then take it foorth and wring the licoure wel foorth. Then take fayre water in a kettle, and set it on the fyre, and put therein a quarter of a pounde of Allum, and when it is readye to seethe, take it from the fyre, and put your cloth therein as soone as yee haue wrong and strainde out your galles afore sayde, but let it dye a nighte before firste, and then turne it well therein the space of a quarter of an houre. So take it foorth and wring it well, and then seeth two ounces of Brasill in fayre water, the space of two houres, then take that from the fire, and hang another kettle ouer the fire, and putte therein grutys water, so warme it a little, and cast therein two li. of grening weede, then put your linnen cloth therein, and

looke that no Allum haue beene in that water. Then let it lye therein halfe an houre, and ſtirre it well with a ſtaffe and then take out thereof the ſayd linnen, ye may then caſt away the ſame liquor and waſhe your kettle cleane, and put therein of the cleareſt braſill water and let it well colour therein. Then take your linnen and waſh it well in fayre water, then take of fayre water in a panne, with a little Allum and ſo ſeeth them both together: and therin ſeeth your Lynnen cloth fiue or ſixe paternoſter whiles. Then take out the ſayd cloth and wring it well, and after that put the ſayd cloth into the kettle of braſill water, and therein ye ſhall turne and wind it well, the ſpace of a quarter of an houre, then take it foorth and wring it a little, and likewiſe you ſhall doe with the dying of the Fuſtian, but vnto your Fuſtian you muſt haue two partes more of Verdigreace and Allum, and that your Fuſtian muſt lye therin halfe a day and a night, then wring it foorth, and let it dry, then after yee maye rayſe his cotton with cardes meete for that purpoſe, if yee will haue your Linnen more fayrer, caſt in the Kettle with your ſayde braſill, ſome lye made of white Lyme, then put your cloth therein, then turne and wind it therein the ſpace of foure paternoſters, and then take it foorth thereof and wring it well, and ſo hang it vp to dry.

How to make your branne water, wherewithall you ſhall vſe to dye red.

Yee ſhall take a batte full of wheate branne, and take ſo much water as will go into the ſmall kettles, ſo let it haue a welling or two on the fire. Then poure it into a fatte. then take two other kettle fuls of water and warme it, and put it therein alſo, but firſt ſtirre it well, and ſo couer it well. The fyrſt day you muſt ſtirre it often, and then it will be the better, then ſhall ye let it ſtande foure or fyue

dayes

vayes till it waxe the riper, and which will bee the better for your purpose, and then yee may occupie as you shall see cause.

For an yron moll in Linnen.

To take fourth any yron moll in linnen cloth, take a chasing-dish with coles, then couer the coles with a pewter dishe so let it bee hotte. Then lay your linnen theron where the moll is, and with a Limon, or an Orange, but the Limon is better, to rubbe your moll therewith, and still as it dryeth in, laye the iuyce theron, and still rubbe it so, till it be all cleane, and this waye will haue it all out. Oft prooued.

To dye silke quoyues in a red

Ye shall first laye your silke in Allum water, and let it seeth therein, and with brasse water also halfe an houre long both togeather, then take a little grening weede, and the lyke of brasse water, and let it bee made hotte, and put the silke therein, but let it not seeth, but take it oute and rence it in lye, and then in water, and then it will be faire and well.

To dye silke in a sanguine colour.

Ye shall dye silke in a sanguine, as ye must in all sorts take Allum as ye doe grening weede, then must yee take a little fayre water, with a little brasill, and seeth them together. Then take parte thereof, and seeth the silke therein, and as that is taken out, so take an other, and then the thyrd time, then put it in lye, and so rense it, as is afore-sayde.

To dye silke blue.

If ye will dye blue silke, that silke must then bee white, which ye must first soke in water, and then wring it foorth then ye shall put it in your blue dye, and there yee maye make it with a light colour or darke as ye please.

A fayre greene to dye.

If ye will haue a fayre greene, take a little brasse water and a little Allum, and seethe them together, and when the Allum is molten, put your silke therein, and let it seeth the fourth part of an houre. Then take againe a little brasse water, and a little wood, and put it therein also, tyll that it ware a fayre darke yealow. If ye will haue it more yealower, then put it in the blewe dye, wherein ye may make it light or darke as you please.

To dye blacke silke.

Take to one pound of silke, 12. gall nots, and beat them to poulder, then seeth the silke with the gals in fayre water, a good halfe houre long, then take of the blacke dye, and therein seeth it another halfe houre, then take it foorth and let it be colde, and then put it againe into the blacke dye, and let it there seeth another halfe houre, if then it be not fayre: let it seeth therein so long till it ware a fayre blacke, then spoonge it in the water, and so let it dry.

A Purple silke to dye.

When ye will die a purple silk, ye shall take to one pound of silke, 4. ounces of Allum, and seeth the Allum in common water, & lay the silke therein, and let it so lye foure

houres

houres. Then take to euery pound of silke, two pounde of purple colour, & seeth it together as hereafter is written, which is, ye shall take halfe pisse, & halfe water together, & seeeh it therin till it waxe cleare and faire, and thē spoōge it in fayre water. Also to eche pounde of silke it behooueth to haue foure ounces of Allum. Also for redde silke to dye with crap dye, so calde in dutche, which yee shall dye with foure pounde of Allum, and also ye shall dye sanguine silk with Allum, and also yealow ye shall dye with Allum.

To make a good blacke dye.

Take a pounde of galles and fourth parte of coperas, and seethe these together, then put the cloth therein, and stirre it well about, then hang it to drye, then prepare your dye as thus, take a good great fat, and put therein a fourth part of Rye meale, and halfe so muche of swarfe (of the grindstone, and so much of elder barke, and in like of olde yron, and the scales of yron, as it comes of by the hammer beating, stir this all well together, and so let it stand three daies or euer ye put your cloth therein, and at each time let your linnen drye afore ye put it therein.

To dye a greene.

Take a light blue colour and put it into Allum water two houres long, then hang it to the time, there as the wind may drye it, and then put it into the foresaid woode and so vse it as it is afore declared.

To dye a carnation.

Take Purper that is drye, and laye it to soke a night in pisse, then take your cloth that is allumde, and drye & put

it therein, but ye shall seeth the purpur twise in faire water, then set another fatte by the fyre, and let it seeth, and therein ye shall first put your cloth, and then all weat, put it into your dye, till it be fayre ynough.

To make a red carnation.

To make a redde carnation dye, ye must dye your white cloth, linnen or woolle, or silke yearne, to doe it well, yee shall gall and Allum it well. Ye must take an hearbe called Foli in Dutche, that shall ye finde by ditches, & banks, take a pound thereof that is dyze, this is in tuftes, and it is hote like wee asshes, and carnation in sight, therewith men doe make a red carnation woollen cloth, with the greene or white, or of silke, and if anye carnation haue lost his colour, or if anye carnation haue loste his dye, with that yee shall dye it againe, that it shall not leese his colour, and to foure elles of cloth, ye shall take a pound of gruis, or of that hearbe afore named, which ye shall beate to poulder, Then shall yee take lye make of Oake asshes, mixe a parte therewith, and another parte of cleare pisse cleare and old, of eche like much. If yee will haue a light dye, take pisse newe made, and of the foresayde lye, in like much & therewith yee shall dye, with the foresaid poulder put therein, & as it is sod, put in that which ye woulde dye, and seethe it two houres long, and then let it dyze.

To dye Linnen.

Yee shall first take to one stone of flockes fiue pound of sope asshes (which are calde in Dutche Wee asseen) of the best, with sixteene gallens of water, seeth it togeather an houre long, and then let cleare one night, then gentlye poure of the vppermoste thereof, and seeth your flockes therein one houre long, and then proue if your flockes

or

or ſilke be ynough ſodde, alſo take a little of your Flockes in your hand, and thruſt it harde to a redde cloth, alſo put it in your mouth, and if it goe by and by a parte lyke a ripe apple, then it is ynough ſodde. Then ſpoonge it in faire water, and then putte in braune water, accoꝛding to the quantitye of woollen cloth, and ſeeth youre Flockes therein, then take it out thereof, and take braſill and put it in water accoꝛding to the quantitie of the Linnen, that is to eche elle of cloth foure ounces of Braſill, and as the braſill hath ſod a while, then ſtraine the braſill thoꝛow a cloth, and put it againe into your Kettle, and your Flockes alſo, and let them ſeeth, then take a Ladle full of lye and put it therein, thus ſhall ye make it as bye as you will, and if yee will haue it moꝛe higher, then put moꝛe lye therein, alſo foꝛ thꝛee pounde of Flockes, take foure ounces of Allum, and ſeeth them togeather, and if yee will ſeeth vyde Flockes, take lye of Sope aſhes, as befoꝛe it is wꝛitten, which you will ſeeth with Sope aſhes, then ſcoure it, and let it dꝛye.

To dye cloth with facet Woode.

As ye will dye cloth with faucet Woode, ye muſt make your lye with ſope aſhes of Denmarke, and rayne water, which ye ſhall let ſtande thꝛee houres long, then ſeeth it. but the Woad muſt bee firſt ſod in the lye, and when it is ſodde, let it be cooled with other colder and ſharper lye, with the laſt lye yee ſhall put to one pounde of yearne, and a great peece of Allum, and put it therein. Then ſhall yee put that dye into a fayꝛe kettle oꝛ fatte, then take two ounces of ſpaniſh greene, which ye ſhal ſoke therin two oꝛ thꝛee houres long, then toſſe and puſh it vp and downe twiſe oꝛ thꝛiſe, and wꝛing it, and with colder lye put therein, and toſſe it with a diſhe too and froe. Alſo another manner

is, take a dish full of vnslecte lime, and quench it with water, then take two dish full of wood ashes, and mix it with the chalke all together well, and thereof yee shall make a good strong lie, and let it three or foure times run through the tubbe, then take the saucet wood, and hew or cut it in small peeces, and cast it into the lie, and let it seeth therin halfe an houre long. Then put therein sope ashes, and let it seeth another good halfe houre, take it then off, and put thereto spanish greene, and let it boile twise or thrise, and then sponge it, also with three pound of saucet woad, it behoueth to haue two ounces of spanish greene, & as the cloth haue bene in the first licor, if then it be too broune or too yealow, then put thereto of wine ashes, & a little allum.

To die woollen cloth sanguine.

To die woollen cloth saire, yee shall first seeth good rie meale in faire water, and then put it in a faire tubbe or pan. Then cast faire water thereon, and let it so stande three daies to cleare, then take of that water, and put therin two ounces of allum, to an elle of cloth, and let it seethe two houres long, then let it hang and coole without wringing. Then put that water sooth of the vessell with the meale, and put therein a pound of the best greening weede, and heate that also, but let it not seeth, then put your cloth therein, & tosse it well with your hands without seething, and take it sooth and put it in a panne with faire lie, and let it lie therein, and so let it drie, and it will be a red. If yee will make fairer, you must haue of brasill, take an ounce of Allum and allum it as aforesaid in another water, then seeth two ounces of allum with that brasill, in brasse water made, and as the brasill haue sodden a while therein, so put therein of cold water, then take so muche thereof out as will weat your cloth in, and stirre it well therein, then shall ye take of other die, vntill the time that

it hath sufficient ynough, if yee will haue the same a sanguine, laye it in fayre lye of Sope ashes, and there it will haue a faire sanguine die.

To die woollen yearne, or cloth.

To make this dye, put two foure pounde of woollen yearne, or cloth, two pounde of woad. Put this woad in a Kettle, and cast therein of fayre water, then cast agayne halfe a tin dish full of ashes out of the fyre, and as soone as it seethes, put your woollen yarne therein, then let it seeth eyght or nyne pater noster whiles long, then put your yarne forth, and put a little water in, out of the kettle, and then a few ashes out of the hearth, and put your woollen yarne againe therein: and so let it seeth a good while, if it be a browne blue, it shall be a darke greene, and if it bee white woollen yearne, so it shal be a yealow colour.

Againe to die woollen yearne.

As you will die woollen yearne that is greene, your yearne you shall first seeth in brasse water, which is to vnderstand, to foure pound of yearne, ten ounces of Allum, and let it seeth two houres, then wring that out, and put it in the die thus made. To foure pound of woollen yearne take two pound of woad, and seeth the woad well with hearth ashes, in lee made a daie before, so let it seeth the fourth part of an houre, then put the cleare into a cleane fatte or vessell, then take the fourth part of an ounce of spanish greene called verdigreace, poulder it well and cast it therein, and stirre it with a sticke or staffe, then put in your yearne, so turne and tosse it therein the fourth part of an houre, and then let it drie. If it bee not faire ynough, then put it in againe, and doe as is said before,

also as yee would dye blue woollen yearne, yet shall put it first in warme water, then wring it sooyth and dye it blue, as it is afoyesaid.

To dye with brasill as redde as a Rose.

Take sixe elles of Linnen, and thereto halfe a pounde of beaten galles, of the best: then put it in a fayre water, and let it seeth about two houres, but the galles should rather be all whole, and when they are soode, set it from the fyre, and put it gently in another kettle or fatte, and then putte your linnen therein, as hotte as you may handle it, and stirre it therein foure houres long, that done, then wring it well sooyth, and hang it to dyye. Then take foure ounces of Allum, and seeth it with water, and when it is soode, take it from the fyre, and put your galled cloth therein, as hotte as yee may suffer it, the space of a quarter of an houre, then take your brasse water and put thereof in a kettle, and as it is warme, put therein two pounde of grening weede, let it the first tyme soke well therin, and let it be well and hot, but not seeth, and then put your cloth therein, and stirre & handle it well at the first with your handes, nye halfe an hower with a staffe tost well all about, and well handled in the dye, and then yee shall take youre cloth and spoonge it in water and wash it cleane. Then take a little Allum, and seeth it with water, then shall yee haue two ounces of Brasill soode in light water, and putte your cloth therin fiue Paternosters long. Then shall yee haue two ounces of Brasill soode in light water, and put your cloth therin, then handle and stirre it well therein and stir it well about the space of a quarter of an houre and wring it not to sore, then dyye it. Then if it be not dyye ynough, then wear it as before is sayde.

How to make a greene water.

Take nie halfe an ounce of Verdigreace, and crushe it well in a woodden dishe, then put thereto the yolke of an egge, and two blades of saffron: then take of the leaues of spurge half a handfull, and beat them in a morter and therto cast a good glasse full of vineger, and straine it thorow a cloth. Then take of this stuffe, and put thereof in a dishe with the Verdigreace and stir it well togither, and make it thinne, that it may be the better to die, or to worke with a pensill, or as ye shall seeme best.

To die faire Linnen with brasill.

Ye shall take faire water, and heate it ouer the fire, then shall ye haue the poulder of galles, and put thereof into the Kettle ouer the fire, and so let it seeth a quarter of an hower: then take it from the fire, and take another vessell and put therein so much cold water, as of the other in the Kettle, and put that hote in the kettle thereunto. Then put your cloth therein, and stirre it well vp and downe therein, and as you haue done so a while, then let it lie therein foure houres long in that gall water, then take your panne againe with other faire water, and set it ouer the fyre, and make it hote, then put of Allum therein to the panne ouer the fyre, and as that water is hote, and the Allum melted, yee must then haue another vessell of fatte with colde water, as muche as of the other hote water, and put the allum water therein, then put your cloth therein, and stirre it as it is aforesaid, and so lette it then lie therein foure houres long, when you haue so done, then yee shall wring it out and hang it to drie, or to drie in the aire, but let it not be too drie. Then shall ye take your brasill made in poulder, and put it in the panne, and so lette

it seeth therein the quarter of an houre, and before that brasill doe seeth, ye shall take wheat flower, and put therein, and mix it altogether well in a dish, and put it into the Rettle before it do seeth: thus done let it seeth, and as it hath sod, then take forth so much of the brasill, as yee maye put in your cloth, and stir it well about as is afore declared thus done, let your cloth rest therein a good while, then wring it forth and hang it to drie, and as it is drie, ye shall take that licor that it hath laine in, and put that away, then take againe so much brasil as before, & put that cloth therin againe, and then hang it to drie, and as it is drie, then put it in another licor, & hang it againe to drie, and then it is ful done. And to know the quantitie of waight which is to euery elle of linnen cloth, ye shal take a loot of gall pouder, so called in dutch, and as much of Allum, and to ech ell of cloth, one ounce of brasill.

To make a faire yealow.

To make a yealow that ye may worke with oile or water ye shall take woad, so much as ye shal please, and let it stãd in steepe a night and a day in lye made with sope ashes, and when it is thus steeped, then shall ye seeth it, and couer it close so long as it seeth, thus done then set it from the fire, and put that licor into another pan, & so straine it thorow a clean cloth, then take the pan and poure the thinnest aboue off, so long til ye see the die undercome withall, then take the foresaid cloth, and straine it againe thorow it into another pan, so long as ye thinke the substance of the woad to tarrie in the cloth, til yee thinke that that water is thin ynough to straine, and then ye may vse it.

A faire linnen cloth to die blue.

For to die a fayre blue, ye shall take a pan of faire water,

ter, & hang it ouer the fire, and let it be seething hote, then must ye haue a vessell of halfe an Ame, so cald in Dutch, or thereabout, & as your licor is hote put thereto 3 pounde of wheat bran, & 3 pound of ashes, & a pound of grening wede, stir al this in the pan, and let it seeth iii. or iiii. paternosters long, thē take of floray vnder halfe a pound, & soke it in fair water, & let it there rest a quarter of an houre couered, then take your clean vessell or Ame, & therin put your soked floray, then take the hote licor ouer the fire, but let it coole or ye put it into the fatte, then put it in and stir it well, and so couer it well and close, and let it so rest six hours long, then vncouer it and stir it well about a good while, then couer it close againe, and let it rest other six houres, then vncouer it and stirre it as before, and so stop it againe, then vncouer it within two or three houres, and looke if the die beginne to come, or beginne to war greene, if they doe not, let it rest longer, and stop it close if ye see it bee come, put therein some of your cloth that yee would die, and turne it well therin, then wring it out and let it rest two or three houres: then put in againe your cloth, and vse it as aforesaid, and so stop it well againe, and let it rest so two or three houres, till ye shall see the die begin to come, and the flower to lie aboue, and to euery going that ye go thereto, see if the colour be greene ynough, or war greene, and when yee shall see it so, ye shal scum off the flower with a dish, and then put your cloth againe therein, stirre it well and wring it forth, then stoppe it againe well, and thus ye must colour three or foure times a day. Then must ye take the die in the vessell, and hang it ouer the fire againe, and there let it be hote, and put therein two pound and a halfe of ashes. Then put it in the fat, and so let it rest, but stoppe it well and close, so let it rest a night, but stirre it once in the night with a staffe, and see in the morning if the die be come, as is aforesaid, and so put in your cloth againe, but lette it not lye therein too long, that it coole not the die, and as you

 haue

haue thus died it foure times. Then shall ye make it hote againe ouer the fire, putting therein two pound of pot ashes, and so let rest all a night, and stirre one in the nighte as afore said, and stoppe it close, and when ye go thereto, see if the die be come, if it be come, ye maie die, as before, that ye think good, and when your colour waxeth a faire green, then is your die good and ripe, and the flowers will lie faire aboue, but as it begennes to wax yelow, then it is too ripe. Then must ye put in more cloth.

How to die a faire linnen with brasill.

Ye shall take so much linnen as ye will, and to euerie elle of linnen, take two ounces of gall nottes, or xii. nottes, these nots ye shall breake in two or three peeces, then put them in a Kettle with water, and let them seeth together, and as they haue sod a quarter of an houre or lesse, take it from the fire, and take your cloth foorth thereof, and let it a little soke by, but let it not dye. As ye haue thus sod it, ye shall take another Kettle with faire water, and put it ouer the fire, and make it seething hote. Then shall ye to euerie elle of cloth take two ounces of allum, whiche yee shall put in the said water, and as it is melted, yee shall take the foresaid cloth, and put it into the said Kettle to the Allum, and let it seeth together a quarter of an houre, then take it foorth of the Kettle and wring it a little, then hang it to drie a little, but not too much. Then must yee haue your sodden brasill as thus: ye shall take lie made of wood ashes, but see it be not too strong. And therto so much put in your pan as will make your cloth weat, then put your brasill in the panne with the lie, and so let it seeth a quarter of an houre, then sette it from the fire, and haue readie an earthen panne, and by and by, put your lye or brasill therein, then shall yee put your foresaid cloth

therein, stirre and turne it well therein, but see that it bee not too vyle of the said Allum that it hath bene sodde with. Also to foure gallons of lie, yee shall put lesse then halfe a pound of brasill pouder small beaten.

To make a faire brasill colour, to worke on cloth or paper.

Ye shall take a faire potte, and put therein a pounde of chalke small broken, and put thereto a pottle of good Vineger, and stirre it well together. Then let it stand a daye and a night then poure the clearest into a faire panne, and see that no chalke go therein, then take two parts of the said lie, and put it in a faire pot, and let it ouer the fyre, and seeth it fiue pater nosters long, then take it from the fyre, and put the lycor into a faire panne, and ye shall put thereto fourteene ounces of Allum, and stir it well with a staffe, then take the other part, & put it to the said brasill wood, the which ye haue changed, and let it there seeth, as afore said, and putte that licor into another panne, and put thereto thirteene ounces of Allum, which ye shall stirre so well as afore said, and when ye haue soft it long, put it then to the other, and stirre it well, as ye will haue it vyle take a pan and fill it full & set it in the wind eight daies or more, and there let it vyle, and as it is faire, ye may worke therewith.

Blue Buckeram to die.

Take three pound of gruis of Turwin, to calue in suithe, and a pound of Wede, a pound of Floray, and to three pound of Sope ashes, take ix. quartes of water, first ye shall put your Floray into a faire fatte, and put thereto tenne quartes of water, and stirre it well altogether, this must be so hote that ye cannot suffer your hand there-

in, in the other water ye shall put the gruis, with the ashes and Wede, and that put together, and so stande, which you shall stir twelue houres long, and waxing a blue, so ye may worke with it. If it be not blue inough, so let it stand couered twentie houres long.

A red to die with crampmede.

Take a pound of Crampmede to three elles of Linnen, and take a faire pot with water, and set it by the fire till it be readie to seeth, and put therein two ounces of gals, and let them so seeth together, and then put your linnen therein, and take it sometimes out and in, and at eth time wring it well out, then take a faire pot with faire water, and make it seething hote, then put therein an ounce of Allum, and so let it seeth well, then put your cloth in as afore said. Then take another pot of water, and let it seeth therein till it be red, then take that cloth out, and cleuse it all about with a cloth. If ye will haue it more darker then must yee haue a lie of vnquenched chalke, with the like vie: men with woad ashes do make a redie pie of colour, without vnquenched lime, in hauing woad ashes in steepe of vnquenched lime.

To die blacke Velues or linnen.

Take of gals and coperas, & seeth them together, and put your linnen therein, if it be gray silke, then take of elder barkes, and old yron, and put all in a hearing barrell or vessell. Then take gruis or swarfe, this shall bee a thirden pele of the fat, the other two parts shall be faire water, so let it stand three weekes long, and so stirre it often well about, and put your gray silke therein, and as this is done, so shall ye hang it to drie, and so put it in againe, so often till that it be blacke inough. In steed of galles ye may take barkes of oke, and shomakers blacke.

To make grate Florie.

Take floze and lay in ſteepe 24 houres, then wring it out thozow a cloth, then take lie of wine aſhes, and ſpread it 2 houres long on a faire table, then take the ſaid lie, and put it in thzee veſſels, and take the Floze and put into one of the veſſels. Then put it well toozth, then put that Floze in the leaſt veſſel, then ſo in the indoeſt, and in the ſtrſt, but ere ye put the linnen therein, put in vineger & wring it out.

To die ſilke red.

Take of good wood aſhes, & make a good lie thereof, & put therein of willow oz facer wood, & barbary wood, oz yelow wood, and ſteepe them therein an houre, then ſeeth a quarter of an houre, then put your cloth therein, and put in a little ſpaniſh greene, but that cloth ye muſt firſt allam it.

To make a blacke water to die with.

A blacke water to die all maner of ſilke clothes, ye ſhall take halfe a pound of gall nots, and put thereto ſomewhat leſſe then a pottle of water, and an ounce of ſwarfe of the grindſtone, and a good deale of the filings of yron, make it ſeeth, and put thereto a quarter of a pound of Coperas, and ſeeth all to the halfe, and put therein a pound of gum arabic, then ſeeth it till the gum be melted. Then ſet it from the fire, the older it is the better it will be.

To make a chicke water to worke on yealow ſilke.

Take a pottle of the beſt vernice ye can, & put in an ounce of bzimſtone in fine pouder, & halfe an ounce of Camphier, then

then seeth it a while, and let it coole, then straine it thorow a cloth, also with this ye shall worke thinne, and this must be sod with the fourth part of gum Arabic.

To worke on yealow silke, white, graie, or azure colour.

Take a pottle of Conduit water, and a fourth part of Arsenike in poulder, and two ladle full of woad, cutte the woad in small peeces, and make it seeth as hering, that is, softlie, then set it from the fire, and put therein so much of graines, as ye put in porrage, and herein also yee shall put in of gumme of Arabie, so much as you shall seeme good.

To make a red water.

Take a pottle of faire water, and a fourth part of gumme, and halfe a pot of faucet woad (so cald in Dutch) and then seeth it together till three pintes bee consumed, then set it from the fire, and herein yee shall put halfe an ounce of spanish greene, and then put in also of graines, so much as ye doe in seasoning your porrage.

To make red with brasill.

Take your Linnen to one pound, take a fourth part of Allum, but first seeth your Allum, then laie your linnen therein the space of two houres, then take of beaten gals, and put water thereto, then lay your linnen therein, and put in a quarter of a pound of brasill, and an ounce of gum of Arabie. Then let it seeth a fourth part in, and then put in your Linnen. If you will haue it a redde, then put in no galles.

To

To make a red water for white silke or woollen, greene, yelow, violet or azure.

Take a pottle of running water, and an ounce of brasill, seeth these till the halfe bee consumed. Then take it from the fire, and put in so many graines as yee put vnto a pot of porrage, and a fourth part of gumme. But if yee will make it a light red, put it into another fat, whereas there is a quarter of a pounde of Allum made in poulder, and so let it rest all a night, and it will do well.

To make a blew.

Take three parts of Sope ashes, and one parte of vnquenched lyme, and make a lye thereof, and then lette it cleare, then straine it thorow a thicke cloth, and you shall take xv. quarts of the said lye, and put therevnto a pounde of Bloemen (so called in Dutche) then stirre it well together with a staffe, and warme it ouer the fire, so that you may not skant suffer your hand therein, but first your cloth must bee sodden in Allum, and also dryed, then put it in the warme dye two or three times, then after, if yee will haue it blacke or light colour, so you may vse it, but before all thinges your dye must bee warmed, before ye dye or colour therewith.

To make a faire sanguine die.

Take vpon eche elle of Linnen, six galles beaten into poulder, and then take three gallons of water put into a tubbe, and put the poulder of the galles thereto, and stirre them well together, then laye your linnen therein, and turne and wend it well. Then take and wring it drie out, then let it lie therein againe two houres long, but at eche

houre ye muſt wring it, as before, and lay it therein againe in the tubbe, and as it hath laine two houres, & ſo wrong out, then take one ounce of Allum, of the beſt, and three gallons of water in a Kettle, and make it wel and hote, redie to ſeeth, till all be well molten, then ſet it from the fire, and put your linnen therein, & do it as ye haue done before againe two houres long: then after that take a panne, and put therein two gallons of water, and warme that like the other, then take three ounces of braſill and caſt it therein, againe let it ſeeth a quarter of an bower, then take a good quart of water, and caſt it therein ſeething, and take a quart of the ſame die, and lay your linnen therein ſixe or ſeuen pater noſters long, ſo that the dye be dronk all in the ſaid cloth, then wring it foorth and handle it well, then lay the cloth againe in that die, toſſe it, and turne it and wend it well therein, and let it lie ſo long therin as aforeſaid, and ſo wring it out, then take the third colour and lay it therein, and let it lie therin a quarter of an bower, and ſo it will lie well.

A light red die for skinnes.

To die a faire light red, take xiiii. dye ſkinnes as they come from Antwerp, and put them in the riuer, or in water two daies and two nightes, then take them out of the ſayd water, and put into a fat, a Kettle full of vnquenched lyme or chalke, and put ſo much water therevnto, as the felles may well bee couered therein, then ſtirre them well with a ſtaffe altogither, and put your felles therein, then turne and toſſe them well, if it be in the ſommer, it ſhall be inough to lye therin eight daies, & yee muſt eth two dayes ſee vnto them, if it bee in the winter, they muſt lie therein a moneth, then take your felles out and hang them againe in the foreſaid riuers or water three daies & three nights, then after waſhe them well in a tubbe with luke warme

water, and ſtampe them with your feete, then after waſhe them againe in the riuer water as afoꝛeſaid, and hang a Kettle ouer the fire with fayꝛe water, and therin put foure pound of allum, and when it is molten in the water ſething hot, putting in ſo much water that it may bee no hoter but your hand may ſuffer therin without ſcalding, then ſette it from the fyꝛe and put your felles therein, and ſtirre them well with your hand, ſo let it reſt a day and a night, but as ye go to bed you ſhall ſtirre them once wel, then after take your felles foꝛth, and wꝛing the water wel out, and as your felles doe ware ſomewhat dꝛie, ye muſt weat them againe: Then take foure pottles of piſſe that is ſtale, hang it ouer the fyꝛe in a pan, let it ſeeth well, and ſcum it cleane ſo long as any ſcum will riſe, then put in a pot full of beaten lack, and let it therein ſeeth a little, and put therein ſo much allum as a haſell nutte, and giue it therewith a boiling, then ſet it from the fyꝛe, and let it ſo reſt till it bee colde to ſuffer your hand therein, then put a glaſſe full thereof in your felles which be readie lowde like a ſacke, and hold it too aboue, and with your other hand hold vnder, and ſhake it vp and downe as ye would halt meale, doe thus ſo long till the colour hath well taken the leather, then turne your felles about, but if it be faire ynough let it ſo be, if it be not faire ynough, put of your ſaid ſubſtance againe another halfe glaſſe therein, and ſtirre it about as beſoꝛe, and then rippe your felles, and hang them to dꝛye in ſome hye lofte. And as they bee dꝛye, ſo take and lay them a night in a fat with water, and next day taw them vpon a ſharpe rawing ꝛyon, vntill they be all woꝛkemanly done, then are they well.

To make leather red.

Take an oñce of Allum & melt it in a gallon of water, then take a calues felle & ſpꝛead it on a rame, ſo it muſt bee rubbed al ouer with allum water firſt, then incõtinent ye ſhall

ſtrike it al ouer with brazill water, and let it ſo drie in, and then ſtrike it all ouer againe, and ſo let it drie in like, but the colour or die muſt be made warme al waies, when you rubbe thereon. But firſt you muſt make it weat with colde water, and wring it againe out, and then ſtretch it forth on a bord, and ſo ye may vſe it.

The foreſaid brazill water, yee ſhall make thus. Take three gallons of raine water, and put therein foure ounces of brazill woad made in poulder, and half an ounce of Wey aſhes, cald Sope aſhes. with a little Saffron. Then ſeeth it ſo long till the third part be waſted. Then cleanſe that out, and the pot with raine water againe, and let the halfe ſeeth away. Then is the ſtrength all out, and with this laſt water ye ſhall colour firſt, and with the firſt water you ſhall die or colour laſt.

To dye red felles.

To dye red Leather, ye ſhall ſeeth Lacke in bene ſtraw, and a curſy piſſe, as afore is. Then put therein ſo muche as two great beanes, and then take an ounce of brazill water, and ſo let them ſeeth together.

To dreſſe Felles with gold.

To dreſſe Felles with gold, take browne red, & grinde it on a ſtone, with water mixt with chalke, and lyme water, and therewith you ſhall ſtrike your felles twiſe ouer, then lay your ſiluer or golde thereon, and let it drie, then ſhall ye ſmooth it with a tooth, and ſo ſtrike it ouer, and then dry it in the ſunne.

To colour greene Felles.

To colour greene felles, take ſpaniſh greene, and grind it

it vpon a stone with wine Vineger, and some saffron, temper this with gumme water and lyme, and so strike your skinnes therewith.

To gilde on leather,

Ye shall ouerstryke your leather thryse with whites of egges and gumme water, then lay your gold thereon, and licke it well and fayre, or the yolkes of hard rosted egges, mixt with gum water and ground, the red and the graye skinnes you may vernish them, take a flatte vessell, and put fire vnder, and spread the felles thereon, and strike varnish also ouer the skinnes, where it is coloured, but afore you strike your felles strike it warme on the vessell, and then let it drie, then smooth the colour all ouer euen, and when it is drie, then licke it, or burnish it with a tooth, and as ye will haue it fayre, so take an ende of a tallowe candle, and rubbe it on your arme from the hand vnto the elbow, then strike it all ouer with that parte of your arme, and it is done.

Againe to colour leather red.

Take the vie for a red leather, and take an ounce of brasill in a nealed pot, and seeth it vntill the thirdpart be wasted, but first wasshe your leather in Allum water, or in other water, but lette it not lie long therein, to lette it drie, and put it therein, and let it roll two daies and two nights on a tacke, and then hang that leather in the aire to drie.

If ye will haue it sanguine, take of vine branches ashes, and make lie thereof, and with this lie seeth your brasill woad, and so ye may colour red therewith.

To colour leather greene.

Take an ounce of Equisetam, in English, Horsetaile, it is an hearbe growing in low places or medowes, put therto of old standing water, with a quantitie of Allum pouder with a little coperose beat in pouder, so vse it.

To colour a blue leather.

First you shall take an ounce of Endix, so called in dutch, with one ounce of chalke and a pottle of Vineger, or good sharpe lye, then put all into a bason, and there stirre it all well together, first your felles must be made redie thereto, as afore is declared, then put your stuffe thereon, and so vse it as the other, and it will shew a faire blue element colour.

To make a faire red colour.

Take your leather which is allumde before, then take of old pisse of such as vse to drinke much wine, and lette it stand till it stinke, then take the cleerest thereof, and seeth it till the halfe be wasted, then take two ounce of lack, with one part of brasill, a part of Allum, and a part of Sarmoniacum, beat them altogither, and put them into a pot, and set it ouer the fire, and stir it well with a white sticke, vntill the sticke ware red as blood, then take it off, & colour therewith luke warme.

Another fine red colour.

Take halfe an ounce of brasill pouder, and halfe a pottle of old water, seeth them togither, and scum it well, then take a litle allum, which must be first kild in clay, first take

it

it from the fire, and then put in your said allum, so reserue it, and vse it as the other.

To make a light blue colour.

Take the flowers of the blue berries among corne, and picke them off, then grind them on a stone or morter, and put thereunto a little vineger, then temper it with allum, as afore said, so shall ye haue a faire blue colour, so may ye vse it incontinent for it will not last long but change colour.

To make a white leather blue.

Take hengarten besien, so calo in dutch, which I take to be the low elder, called Danewort, seeth the said berries in water, then with your hand stirre them well about, and also breake them, so done, then seeth it againe awhile, and so let it coole, and being warme, strike al ouer your leather once or twise, or as oft as ye shal see cause, then take of Endir, so calo in Dutch, and strew of that pouder thereon, and rub it in, and so it will do well.

Another way for red leather.

To make your red, take a pound of Woolfrumps, with a little of vnquenched lyme, then put thereto a pottle of water, and let it stand a night, then take two partes of other fayre water, and a third part of chalke water, with a quantitie of brasill, then put all the said stuffe into a leaden pot, and let it seeth till the halfe be consumed, then it will bee well, and ye may vse it as the other.

To

To make a greene colour.

Take the leaues of an hearbe called Nightshade, then stampe or beate it in a morter of stone, so temper it with Allum, and so colour your skinnes therewith, also ye maye take of the greene berries of the greene berrie tree (which the painters vse) stampe them and so let them rest tenne or twelue daies, then straine them, and put allum water therto, and strike your skin therewith, but first make it warme and so vse it.

Another good greene.

Take one part of the foresaid lowe elder berries, and seeth them in sufficient water, then put therein two ounces of brasill pouder, and an ounce of walkers clay, with a pottle of old water, let all these seeth a good while together, then put in your beaten allum, but not afore, so shall it be a faire colour as the other.

If ye will haue it a more darker colour: ye must therewith strike twise all ouer your skinnes: to haue it a lighter colour, then ye shall mingle it with old raine water, and so vse it.

To colour blacke Leather after the order in Germanie

To colour leather blacke take a herring barrel, and lay in three fingers thicke in the bottome with elder barkes, then take the filinges of yron, and straw it all ouer the saide barkes, then take as muche barke of elder againe, and lay it therein, and so likewise your filings thereon as before. Doe thus, vntill the said barrell be three quarters fulle, and hath taken to the quantitie of foure pottels, or

more

more of the fylinges, then take so much of raine water as will fill it vp to couer it all ouer, so let it stande a month or that ye doe colour therewith, and euer as it wareth emptie, fill it vp againe with fylings, and raine water as before in letting it stand (so filo) a month after, and alwaies let the last couer be the fillings aboue, and when ye list to colour therewith, vnto three pottles of colour, you must haue foure ounces of beaten galles, and two ounces of Coperas water, then let it seeth together before ye dye, that ye may colour the better therewith: thus you maye vse it at your pleasure.

To colour a white leather.

First take your skinnes and hang them in lyme water, till they war supple, or in chalke water. and when they be well soked, if ye will make hast of them, first take of the haire, and clense it out of the said water, so that all the substance aforesaid be taken foorth of the felles, and being clensed then a day or more, then wring the said water all cleane foorth, and let them drie, and to six felles put not aboue two ounces of allum, and let your felles lie therein a night and a daye, then wring them and drawe them wel vntill they be all cleane, and then vse them.

Another faire red colour.

Take a felle or felles, and weat them in allum water and salt mingled together, and to foure ounces of salt take eight ounces of allum to the weatting of your said felles, and also two ounces of lyme, then seeth all in two pottles of raine water, then straine it thorow a linnen cloth, and washe therewith what fell ye will, then spread it abroad on the earth, and take a woollen cloth, and with the same licor,

licor, strike the said felles all ouer, and so lette them drie. Then they will be readie for to receiue your colour, then after that take at the least foure ounces of the lycor of the last end of a brewing, with two ounces of brasill poulder, then seeth all these in two pottles of the lie of sope ashes, with one ounce of Allum, and when it is well sod, take it off the fyre, and all to strike your felles therewith, and then let it drie, and so they shall be readie and soft withall, and here ye must vnderstand with what colours ye shall strike your felles withall, which is, with the red, and with blue, and also greene, for these shall cheefely abide, and not go off, also to wet your fels where linnen yearne hath beene soked in, it will be likewise very good.

To colour a blacke spanish leather.

Take of Pomplemelo, so called in Dutch, and make it warme, then wash your felles therewith vntill the white foime no more off, neither forth thereof, and to a small felle ye shal take foure ounces of Venis tor appeien, so called in Dutch, then beat it a little into peeces, and cast of faire warer thereon, and seeth it till it war soft, so that yee may wring it betwixt your hands, then straine out the water thereof: if it be too hote, take a brode earthen paune, and put the said licor therein, then spread your felle abroade and dip your fell therein till it be well weat, doe it so three or foure times, then take good shomakers colour or black, so much as ye shall thinke good, the which you shall make the felle thorow moist withall, & put thereto a little vitrial roporas, then wring it well forth, & lay it together, and let it dry softly, then take it or it be thorow drie, and wring it betweene your hands, for so it will be soft, do so often times and when it is drye, take of Goose grease, or hogs greare in a woollen cloth, and rub it therewith too and fro a good space before a fyre, or by a hote ouen, so rub and chafe it

well in with your hands, that the greace be not seene, of both, Goose grease is the better, then Linseed oile, or shoemakers traine.

Another way for blackleather.

To make a blacke leather, be it sheepe or other, first take your leather and stretch it, then sprinckle it well out of your mouth with water, then take your tawing stocke, and taw it well therewith, also rub and chafe it together with your hands as Cordwaners do, and draw it wel with your paring yron, then put it on your dressing boord, and strike it with a woollen cloth til it be all euen, and then yee may colour it, and when it is well coloured, then wring the said colour out of your felles, so put it in againe into the said colour, and so do as you did before, at the first time it must bee alway twise coloured, then hang it in the sunne and lette it drie, then ye shall take it againe not being thorow drie, rub it, and so colour it againe, as before. If yee haue it verie soft, rubbe and chafe it betwixt your hands, euer before ye colour, so being well died and coloured, which at the least must be fiue or six times ouer. Thus ye must do for sheepes felles, which also must be dressed with allum, and when you lay your colour vpon them, then take Linseede oyle, and with a woollen cloth, strike your dressing yron therewith, and when your felles be thereon well tawed, then take of your sleight colour or die out of your fat all colde, and colour your felle therewith once after your said linseed oyle. Then put it together, and wring forth the oile and greace therein, and the colour also, and being well wrong out, lay it together, and colour it once againe, and bring thus coloured three times ouer, then take and drie it and so it is done.

To gild on leather.

First ye muſt worke it well, and ouerſtrike it with the whites of egges, and gum water beaten togeather, then lay your gold thereon, and ſtrike it well, yee maye temper therewith hard yeolkes of egges beaten with gum water. The redde and greene felles you maye verniſh, as to take a baſon with a ſmooth bottome, and put coles vnder, and the laye and ſpread your felle therevpon, ſo ſtrike your felle all ouer with verniſh, but before you ſtrike it ouer (on the bottome of the baſon or panne) ye ſhall firſt rubbe and warme your felle all ouer vpon the baſons bottome, then ſtrike your colour all ouer therevpon, and ſo let it drie, and being drie, ſmooth it with a ſleekeſtone, and ſo ye ſhal make it faire.

To make a lie to die a blue.

When you will die a blue, you muſt make a ſtrong lie, and ye muſt take twiſe ſo many aſhes, with a third part of chalke, then make it ſeeth foure paternoſterwhiles, then caſt thereto of cleane wax, which will make it clariſie the better, then ſet it ouer the fire, and lette it there ſoke two houres, or thereabouts, then put into a pan fiue poundes of woad, and put it to the ſaid lie, then hang it ouer the fyre, and warme it well without ſeething, and then put it into ſome hearing veſſell, let it remaine there halfe an houre, then caſt therein halfe a pint of Zemes, ſo called in dutche, and ſtirre it well with a ſtaffe, then couer it well the ſpace of a quarter of an houre, and then it will be good and ready to die with, then take of linnen yearne, or woollen cloth, o-ther fuſtian or Dyer: to haue it a light blue, put it but once in, and to haue it a little browner, put it in twiſe, and to haue it more browner, put it thriſe in, or ſo long till yee

see it browne ynough, and when you haue died what you please, let the vessell rest vntill another day. If then ye will dye more yearne, linnen, or woollen, then must the dye be taken out of the vessell, and put into a Kettle, and put therto foure quarts of lie, as is aforesaid, so couer it well and let it stand one houre, then put thereto halfe a pound of greening weed, and hang it ouer the fyre againe, and let it colour well without seething, then cast it into the vessel with a pint of Zemes, and couer it well, and let it rest a quarter of an houre, and then put therein againe to die what you thinke good, and colour it as is aforesaid, also when ye doe set and prepare your fatte, you must haue to euery ounce of greening weede, one quart of good lie.

To colour or die a blacke.

Take a vessell and put in colde gall water, then laye your Fustian therein, stirre it and handle it well therein, and then put it into the blacke die, and tosse it, and handle it well therein also, and then againe in the gall water, and agayne in the dye, doe thus so often vntill it bee dyed ynough.

To die a faire yealow colour as gold.

Lay first your linnen in allum water foure houres long, then take one part of chalke, and two parts of wood ashes, then make a lye thereof, and seeth your die therewith, also the best lye to die withall, is, to take two parts of wood ashes, and one part of chalke, worke and vse it as you shall perceiue best.

To

To die Fuſtian gray.

Take of hay aſhes, and vyne aſhes by themſelues, and make a lye thereof, then put your Fuſtian there in the hay lie, and then in the other lie, doe it thus ſo long till you ſee it all coloured ynough. With theſe and ſuch like yee may die linnen gray, but you muſt put thereto a little moze of calles.

For to die blacke ſilke or veluet.

You ſhall firſt ſoke your ſilke in gall water an houre long, and then let it dzie, then ſhall yee laye it in the lie of ſaech meale (ſo called in Dutch) and with aſhes of vynes, and lay it therein twelue houres oz moze, then let it dzye well, and after ye muſt ſeeth it in black die ii. oz iii. times, till that ye thinke it be faire ynough.

To die a ſilke that hath loſt his colour.

Take Satten oz Damaſke that muſt be made blacke, ſeeth it fyrſt in the die of Oken barkes, then dzie it in the winde, then ſeeth it againe in your blacke die, and ſo let it dzie alwaies againe. And if then it bee not blacke ynough, ſeeth it in gall water and blacke dye, til it be faire ynough, ſo let it dzie, then rubbe all ouer with butter, oz other greace, and wzing it well betweene your handes, then ſtrike it ouer with a fayze woollen cloth, and it ſo will be well.

For to make a gray fuſtian.

First lay your Fuſtian to ſoke the ſpace of thzee houres, then

then to eight elles of Fustian, take two ounces of broken galles, and put them into warme water, then put your gal water into another fatte, with eight quarts of fresh water, then lay your fustian therein, and stirre it well with your handes therein, tosse it well, and wring it forth wel, & lay it therein againe one houre, & so wring it wel forth, then put it into the blacke die, and lay it therein another howre, so wring it well, then scoure it in the fayre riuer water, and then hang it to drie if then it be not gray ynough, soke it againe in faire water, and then put into your gall water, and then the blacke dye, then scoure it and drie it, so burle it and dresse it vp, and so it is done.

Blacke silke to die.

To one pound of silke, take xii. gall nots beaten into a fine poulder, then seeth that silke with the galles in common water halfe an houre long, then take of your blacke die, and seeth it therein another halfe houre, then take it forth and let it coole, and then put it againe into the dye, and let it seeth therein another halfe houre, if then it bee not fayre ynough, seeth it therein till it be fayre, then take and washe it out of that colour and hang it to drie, and so it is done.

To colour curried skinnes greene, or felles to couer bookes.

Take the buds of white & black thorn, which ye must gather in the moneth of August, when they beginne to ware ripe and blacke, put them in a well leaded pot, the space of tenne daies, then put therevnto foure ounces of allum, and boyle them together well, then put it into a poulcring vessell of Beefe or Porke, and close it well that it take no

wynd, then set it a little in the sunne, and when ye would ye colour therewith, take a little of the said colour, and mixe it with some lye and warm it, and then strike it on the fels and ye shall see a faire colour. Also take Lincaile, or canker of latin, hony, and mixe them together in like, and put thereto pisse, so much that it may take colour, and also staine the felle, and then drie it in the shade.

To make a yealow colour on skinnes.

Take the ripe seeves of Nerpun, so cald in french, drie them in the sunne, and when you will worke therewith, temper it with lie, and with a little allum of the Rocke, and let it rest till it be molten, the which will make it to take a yealow colour, but the lie must first be heat a little.

To die thread blacke.

Take a quantitie of broken or bruised galles, and boyle them in water in a small potte, and when they haue a little boyled, take out all the galles, and put into the same pot so moche Coperas as yee haue had of galles, and put therewith a little gumme of Arabie, and then giue it againe another boyling, so let it boyle a little, and with the said die, yee shall colour therein your threed, then take it forth, and ye shall see it a faire shining blacke.

To die thread gray.

Take of the said blacke die so much as yee list, and put thereunto halfe so much water, more or lesse, as yee will haue your colour deepe or light. Then boile your thread therein, and you shall haue it gray as ye list, other browne or lighter, other after a mouse dunne.

To

To die thread in ſad purple colour.

Take the barkes of Pomgranads, and the pils of dryde oranges, then boyle them in water with a little allum, as great as a ſmall nutte, then let it coole, and when it is cold put your thread therein, and boyle it againe, and yee ſhall haue a faire colour.

For to currie a raw gote ſkinne.

Take a gote ſkinne raw, and put in warme water, and let it reſt there a day, then ſcrape and cleanſe it very clean, and take away all the filth thereof, and to finiſh it, take water, and ſet it ouer the fire, and put therein a handfull of fat, and foure ounces of roch allum, then ſtirre all together till it begin to boile, then ſet it from the fyre, and let it reſt til it be cold, then take an egge and beat it with a little oile oliue, this done, put your gotes felle in the ſaid water, and ſtir it well all about with your hands three or foure times, and ſo it ſhall be in good caſe, and well curried.

For to die ſkinnes in a blue like azure.

The wooll being cleane taken off, and the felle waſhed cleane in faire water, ſo wring it all out, then take the berries of the greening tree, as painters vſe, and the berries of elder, ſeeth them all together in water of allum, then ſtraine that water, ſo let it reſt, then poure away the vpermoſt, and ſtrayne the reſt againe, then lette it drye, and waſh with that cleare water, but ſee that your felle bee cleane, then take your colour, and ſtrike your felle all ouer therewith being warme, and ſo let it dry, ſo it will bee a good blue.

To die ſkinnes with Madder, called Rubea tinctorum in Latine.

First ſee that your felles bee readie waſhed and wroong cleane, and ſo laid abrode. then ſhall yee weat it all ouer with the lies of white wine, wherein bay ſalt haue beene boyled, and ſo wring foorth that againe, then take the aſhes of the ſhelles of Creuis, or ſea crabbes, and temper it with the foreſaid water and ſalt, and therewith rub your felles and waſh them well then with cleare water, and wring him, take ruddle and temper it with the ſaid lies, and rub it all ouer therewith, and ſo with the ſaid aſhes. Thus waſh and wring it three times, if it be not then wel, ye ſhal giue him a colouring with brazill, and your Madder mixte together with the ſaid water or lies, or that ſome tartar haue beene ſod in, which muſt be made warme, when ye lay your ruddle, ſo leaue it a night, then put on your Madder, mixt with allum or lies, or allum catiuum ſteped in water, alſo you may ad vnto it the ſhering of ſcarlet taken out of the boyling lie, which is alſo good.

A good greene to greene ſkinnes.

First you muſt cleanſe your felles, annoint and ſteepe them well in cold water, then take the berries of the ſappe greening tree, and being ripe about Michaelmas, ye muſt ſtampe them, and ſo let them reſt three or foure daies, then put thereto of raine water a little, and then boile them with a ſoft fire in ſtirring them ſtill, then if ye will haue it light greene, put too but a little allum, & the ſadder greene put too the more allum in the boiling, and boile it but a little, then ye may fold your felles in the middeſt, and rub him on both ſides therewith, and then with a little poulder of Allum, then take aſhes burnt of ſheepes dung, and all ouer

rub

rub your faid felles therwith on both fides, then rub him with the faid colour againe al ouer, fo wash him with faire water and let him fo drie, but finely wring him out, then fpread him, and caft off the forefaid thin colour, all ouer the felle, and fo let him drie, & it will be a fine colour.

A fleighter greene with the fappe berrie.

Let your felles be firft annointed and well washed, and fo wrong forth, and then ftretch them as the order is, then take of the fame fap berries aforefaid, let them bee ftampt with roch allum & water, and a little boild, and therewith giue your felle a ftroke or two all ouer, and then let it dry, then giue him a colouring with yealow, made of the fayde berrie, fod with allum water, and againe of saffron, then let it drie, and ye fhall fee a fayre colour.

Another greene for fkinnes.

Your felles being annointed, washed and fpread, yee colour him with the forefaid fappe greene; and put vnto it a few weat afhes, and rub the felle all ouer therewith, and being washed and wiped againe, ftrike him ouer with Indian colour, fod with roch allum, then let it drie, then ftrike him ouer with the forefaid yealow, and fo yee fhall haue a faire excellent greene colour.

To die a crimofine colour.

Scrape hard fope, and fo melt it in common water, & put your filke in a linnen or thin canuas bag, and fo put it into the Kettle to the foped water, & let it boile foftlie halfe an houre fpace, but ftirre it oft for burning, then waſhe it in falt water firft, and after in freſh water, for eche pounde of filke, take a pound or more of Allum, laide fufficiente

in colue water, and therein put your ſilke without the bag, and let it reſt therein eight houres, then take and waſhe it in freſh water, then wring it, and put it in the pan to the crimſine colour, being well ſtampt and cleane; take foure ounces, and boile it with ſo much water as will couer your ſilke foure fingers aboue in water, and vnto ech pound of crimoſine colour, put tos three ounces of galles in fine pouder, or in ſteed thereof ye may put in halfe a pound of Arſenic, which is not verie wholeſome becauſe of the fume, nor the water therof, and when it boileth put in your ſilke as afore prepared, and there let it boile a quarter of an houre, then wring it a little, and vſe it in the ſhade, and ſo it will be faire.

To die a blacke after the common ſort of the countrie women.

They take ſo much water as will couer the hoſe, or other cloth, but firſt they all to ſtrike their hoſe or cloth, with ſwart of the grindſtone, then they laye alder pilles firſt in the bottome of the veſſell, & thereon lay your cloth or hoſe, and then pilles thereon againe, then lay your hoſe thereon, and pilles thereon againe, and then couer al with water, ſo let them boile ſoftlie two houres ſpace, and turne your cloth often therein, then ſee if it be blacke ynough, if not, take new ſwart and pilles, and vſe them as yee did at the firſt, and ſo boile them againe till they be blacke, then ſcoure and waſh them out, and it is done. Some women do take (in ſteed of alder) plumtree pilles, ſome blacke thorne, and ſome yong oken pils, and oke apples greene, and ſo dies with them in like caſe, or the tender ſhewts of brackebriers, or greene walnut huſkes, al theſe are good in ſummer to die with.

How

How to harden iron and steele, and

also to soften, to solder, and to guide.

To make Iron or steele as soft as copper.

TAke a chalke stone vnslect, with as much allum, first stamp the allum verie fine in a morter, then take your chalke and mingle therewith, then spread it halfe a finger, or a finger thicke vpon a linnen clout, and wrap your yron therein, which ye would haue soft, and lay it in the midst of a fyre, and there lette it lie an houre or more, till the fyre is out and bee all cold of himselfe without any other thing done to it. Then shal ye take out your yron or steele, and it will be as soft as it were right copper in his hardnesse.

Another way to soften.

Another way for the same, take onelie a white fire turffe and lay your yron or steele in the middest thereof, and laye it in the fyre, and let it lie there so long, till the fyre doe go forth, and wax cold of it selfe, then take it out, and it shall be as soft as need shall require.

For to make yron soft.

Take the water, or the iuice of Rafany, which I take to be the Rape, then heat your yron hote, and quenche it therein, and it shall become soft againe.

Another way to make yron ſoft.

Take of Sope aſhes, and vnſlect lime, of eyther alyke, then make a lye thereof, which lye yee ſhall ſtrayne nyne tymes thorowe a ſtrayner, then take other yron or ſteele, and laye it therein one night, and it will bee ſo ſoft ye may eaſilye cutte it, will yee then haue it harde againe, ſo quenche it in colde water, and it ſhall ware harde a-gaine.

Another way to make yron or ſteele ſofte.

Take the yelowe flowers of Marigolves, with the ſtele and bloſſome, ſtampe the flowers, and ſtrayne it thorowe a cloth, and put that iuyce into a pot, then take that yron or ſteele that yee will make ſoft, and as red hote as yee canne doe ſtcke it in that iuyce, and it will bee as ſofte as Copper.

Another way to ſoften.

Alſo take ſlecken and long wormes out of the earth, of eche alyke, and a third part of ſalte, then take an earthen potte, and make it full of holes in the bottome lyke to a ſiue, then take the ſalte, and ſalt the wormes into the pot. Then take another potte, and ſette it vnder that pot, then will that ſalt melt with the wormes and runne into the o-ther potte, and that in the vnder potte yee ſhall keepe, then laye a ſtone on that pot, and make it ſeeth well, and ſcumme it ſo longe as any ſcumme will riſe, then take it from the fyre that it maye coole, then ſcumme that off a-boue, then make your ſteele redde hote as fyre, and ſo quenche therein, which yron or ſteele a man may bow like as it were coppere: then to make it hard, heate it red hote,

and

and quenche it in cold water, and yee shall thinke it were fine steele.

To make yron soft.

Take an hearbe called in Latine, Vngula cabellina, it is a clote, cald in English of some Colts foot, or Bulls foote, take and make a water thereof, and heate your yron redde hote, which yee will haue softe, then quenche it in the said water, and it shall become softe, that you maye vse it for your purpose, and so harden it againe as the other.

Another way to soften.

Take Slecken, so called in Dutch, ang stampe it with strong wine Vineger, then heat your yron or steele redde hote that you will haue softe, and quench it in the sayde iuyce, and then it shall bee soft like the other, and to make it hard againe, wherein to quench with cold water, as before.

To make steele or christall soft.

Take of vnquenched lime, with as much of sope ashes, and thereof ye wall frame a lie after this maner, which is, yee shall straine it thorow a strainer ix. times, then take your steele or cristall, and lay it a night therein and a day, so it shall be very soft, if ye will haue it hard againe, so quenche it in cole water as the other aforesaid.

Another way to soften yron.

Take your yron redde hote, then quench it in Linseede Oyle, doe this so often till ye shall perceiue it to be soft

ynough, and another is, take the blood of Eeles, and make your yron hote and quench therein.

Againe to make yron soft.

Take of clay, and lappe it round about your yron with a weat cloth, then lay it in a hote fyre of coles, or in a fyre of white turffes, so let it lie vntill he coole by himselfe.

Another to soften yron.

Take the iuice of an hearbe calde in latine Marubium, in English Horehound, with the iuice of gherwe, so called in Dutch, which I take to be Henbane, and also the iuice of Radish, and mix them with Aquauite, then quench therein, and when ye will haue it hard againe, then make it red hote as before, and quench it in cold water.

To make yron as soft as lead.

Take and make blacke flints into a fine poulder, and grinde it well vpon a painters stone, then put it in an yron panne, and make it red hote, then cast it on a marble stone, till it be nie cold, and then againe make it red hote, then let it coole, and grind it so long vntill it cleaue to the stone and grinder like clay, then put that in a glasse, and sette it vnder the eaues of a house, where the sunne commeth not nigh in the daye, then the night after take out the water, that ye shall finde in the glasse aboue thereon, then take that poulder, and grinde it with the water, and put it in a stillatorie, and let it stille out the halfe, then reuerse the water againe vpon the poulder, and still it againe with a soft fyre, then take and seeth that water till the halfe bee wasted, so done: then take some yron blade that is newe

broke

broke in two, & put it together and hold it so a little while, then take of the water which was sod to the halfe, & with a fether lay it first on the one side of the blade, and when that water is cold, then lay it on the other side, and it will sowder fast with that water.

And with this water ye may make steele as soft as lead, or butter, & to make thereof with tooles, as in wax what ye list. Also this water is a soueraigne thing to helpe the goute, if therewith it be annointed where the greefe is, & it wil soone remedy it. Wherewith this water ye may graue letters on yron or steele, to write with a water thereon with your pen. Then after take of the unsodden water, and put thereto some saffron, and grind it together, and then draw thereon what ye will with other water, and so let it drye, which shall seeme a fayre colour like gold, thus yee maye mixe and grind any colour ye please with your sodden water, and it will shew in like faire.

To make steele or yron soft.

Take the iuice of Hemloc, stampe and straine it, then put vnto it of Neats oyle, and so warme it, and beeing warme, make your yron and steele red hote, and quenche therein, and then beate your yron againe three or foure times, and so quench therein, till yee see your yron become soft, and how like lead, also ye may take oyle, and drop into it molten lead three or foure times, & therein quenche your yron or steele also.

To make yron or steele so soft that ye may easilie wreath it.

Take the gall of a bull, or of an Ore, and mixe it with Vernice and pisse, with the iuice of Nettles, eche of lyke quantitie, then make your steele or yron red hote, and so

quench therein, and ye shall see experience.

To make yron soft another way.

Take Saluiter, Vitrioll, in pouder made and wel beaten together, then ye shall distill them in a Libet of glasse. Then take the said distild water, and pour yron which you would haue soft, lay it therein a day and a night, then take out your yron, and couer it in hote horsedongue the space of fisteene daies, then worke therewith, and you shall see experience. Also in making your yron red hote, ye may quench it in Oxe dongue, or Cow dongue mixt with honie, and oyle oliue. Then heat it, and so often quench therein, and ye shall ser it will be so soft, that ye may make or worke with it at your pleasure.

Another good way to soften yron.

Take hony and scymme it cleane, and then take of fresh new gotes pisse, a quantitie of roche Allum, as muche of Burras, also of oyle oliue, and salt in like portion, then mix them all well together, and make your yron red hote, and so quench therein.

Againe, when ye would soften any yron or steele, strike hold it ouer the flame of the fire till it be hote, then strike it ouer with suet or other greace, then hold it ouer the fyre, and let it drie in, do so twise or thrise and it will be soft.

Also take of horne and scrape it vpon leather, and put thereto Salarmoniac, and pisse thereon, then turne your yron thereon being hote, till it hath consumed your leather and stuffe, and so it will be soft.

Likewise take of Salarmoniac, of vnslect lime, of eche like, of Venis sope more then both the other, stur all well together, and lay your steele therein, and make it moyste with vineger, so let it rest therein foure daies, and worke there-

therewith, ye may vse small peeces so, but for greater, take cow dongue, whites of egges, and clay, temper it with vineger, and lay your steele therein.

Another, take salt, wine stone, of eche in like portion, temper it with clay altogether, and so lay your steele therein, & so lay it in the fyre the space of two houres, then take it forth, and let it coole of it selfe, and it will be soft.

Againe take of sope and vnsleked lyme, of eche in lyke portion, and of Salarmoniac somewhat lesse, and work and make a past thereof, then lay your yron or steele therein, & so lap it round with clay, and lay it in the fyre, and heate it red hote, and then take it forth and let it coole of it selfe, as the other aforesaid, and then ye may worke thereof at your pleasure.

A poulder to soften mettals.

Take foure parts of looking glasse, of galles, of other glasse, of salt, of eche one part, beat and mix them all wel together, and three parts of the same poulder and one part of your mettall, and melt them together, and so vse it as you please.

To make yron hard.

To make yron hard, you shall take the distild water of Veruen, and heat your yron red hote, and quench it therein, do thus eight or nine times, and ye shal see it very hard. Also another, which is, take the green iuice of Marubium, cald in English horehound, with the iuice of Radish, mixt with some Aquauite, and your yron being red hote, quench therein, or take the said horehound, and drie or burn it, and then make poulder thereof, and mix it with much salt, and harden therewith.

Another way to harden yron.

Take of Antimonia, Callamint, and Copporas, beat eche by himselfe to poulder, and then strew thereof on your glowing yron, and so heat it againe, and all to smeare it with these pouders againe, then temper it with this iuice following. Take the iuyce of Celondine, as much of the roots as blades, vnto ten pound waight, and stampe them, and seeth the iuyce to six pound, and when yee will season anye mettall, quench in the sayd iuyce of Celidon, and it shall be hard.

To harden hammers and knives.

To harden all maner of edge tooles, ye shall take horse dongue, and then heat your Knives or other tooles redde hote, and so quench it therein, also to take the fylinges of yron or steele, and they will harden also, or take shoes and burne them till they be blacke, and make a ponder thereof, and take of that poulder with the like quantitie of salte, then straw it vnder and aboue your fyles, which shall bee layd in a square yron, couered with a lid of yron, you shall straw your poulder thicke thereon, and then shut it. This ye shall make red hote altogether in a hote fyre, and quickly queneh it in cold water, and so let it coole therein, and it will be good and hard.

To harden another way all kind of tooles.

Take the iuice of Pentasilon, that growes in heathes, which is a fiue leaued grasse, called of some Synkefoyle, with so much of the iuyce of Wormewood, keepe this in a vessell of glasse. Then take Pieren (so cald in Dutche) and stampe it and straine it thorow a cloth, and all to strike o-

uer

ner with this, your yron being red hote, and as it dryeth in, strike it againe, and it will make it hard.

Another way to harden yron or steele.

To Take the iuice of an heatbe, called Nigill Romana, in Latine it is called Melanthia, and heat your yron red hote, and quench therein. Againe, to harden yron so harde that it will cut all other toales, heat it redde hote, and quenche it in the iuice of Mouse eare, which is called in Latine Pilocella.

To harden yron so hard as steele.

Take Snayles, and the first drawne water of a red die, of the which water being taken in the two first moneths of harueft when it raines, then still it, or taken in the ende of May, then heat your yron read hote, and quence it therein, and it shall be as hard as steele.

Also take Firmus humanus, the tongue of men, still it in a Lymbec, so that no water come thereunto it, and that it may be somewhat drie when ye still it, and take ye heed of his fauour, the water ye shall distill twise in a new glasse, in Balneo Marie, that is, one glasse within another, in a pot of water.

You may do thus, Still mens blood of the age of thirty yeares, and of sanguine complexion, warme and moist, being of a merrie nature and pleasaunt, and whole and sound of bodie, such a one to be let blood in the middest of his age, and that hath plentie of blood, distill of his in the middest of may, or in May. And thus by proofe, and also the water of mans doong, if it be well and rightly stild, heat your yron glowing hote, and quench in that water, so it will harden it as hard as steele. But if that water be not rightly stils, the yron will not harden therewith, but bee as softe as it was before.

To make yron or steele hard.

Take the iuice of Varuen, cald in Latine Varbena, and straine it into a glasse, and yee will quenche any yron, take thereof, and put ton of mens pisse, and the distild water of wormes, so mix altogether, and quench therein so farre as ye will haue it hard, but take heed it be not too hard, therfore take it forth soone after, and let it coole a lit. selfe, for when it is well seasoned ye shall see golden spots on your yron.

Also the common harding of yron or steele, is in cold water, and snow water, so when the edge shal seeme blue after his harping, signifieth a good sign, and a right harding.

To make steele hard, and to cut well.

Take an hearbe calde ox tongue, or langdebeefe, seeth it in water, both the roots and leaues, then make your yron or steele red hot, and quench therein, and ye shal see experience. Also take the yelow flag, cald in Latine Sparula feri-da, some doe call it spurgewort, take with it Varuaine, of either like quantitie, then seeth them together in fayre water a good space, and then let them stand and cleare till it be cold, then heat your yron or steele red hote, and quench therein.

Ye may make mustard, and put bineger vnto it, and quench your mettals therein. Also yee may take the iuyce of earth wormes, with the iuice of houseleeke, beate them together, then straine them, and quench therein, or take of mens haire, and haire of beasts, and seeth them in water till the water war reddish colour, then let it coole, straine it, and quench therein.

Also some do quench in the iuice of radish, and the iuice of smallage mixt together, and the fine pouder of rosin, put

therein,

therein, and therein quench your mettals. Againe: they take the iuice of Varuen, and the iuice of an herbe called Dzagons blood, and of serapen horns, with halfe so muche salt, the iuice of earth wormes, and the iuice of raddishe, put all these together aforesaid, and therein quench your mettals, this waye aforesaid is very good to make your mettals so hard as ye would desire, & make them whole, faire, and bright withall.

To make yron hard, without any crackes, clefts, or warpings.

Take first suet or tallow of a beast, and melt it, then put it in some pot or some other vessell, whereas colde water is, and this molten suet must bee a finger thicke vppon the saide water, and when yee will harden any thing, you must put it downe softly thorow the suet, into the saide water, and the quenching first in the suet, and then in the Water, it dooth saue it without cracke, cleft, or warping.

Another way to harden yron.

Take the iuice of Varuin, and take of land wormes in the field, after the plough, or a nights in gardens, and put a pint of those wormes into a leaded pot, then put vnto a good handfull of salt, then stur them well, and so there will come a water of them, and that water straine vnto the water or iuice of Varuin, and when they bee together, yee shall quenche therein. This way is good for al weapons.

A way to harden pickaxes, files, or other tooles.

Take the iuice of Radish, the iuice of Cadlor, the iuice of great

great wormes a quantitie of goates blood, mix al together, & your weapons being ground, quench therein, and likewise your yron to harden. But to harden Dayls, Axes, Knives, and such is, to quench in the iuice of Radish, also men ofe times to harden files, doe quence in Linseed oyle, or with scrapt horne, or with goates blood.

To harden tooles to hew all other.

Ye shall gather of field snailes, or house snayles, with their shelles, then stampe them a litle, and distill them in a Lymbec and in that distild water, harden your steele or yron, but if ye will haue it very hard, ye shall take sand and brimstone, and grind them together, and so strew it on your yron or steele being red hote, and then quench it in the said water, and they will be very hard.

A way of harding of Augars, Persars, and such like.

Ye shal take of mens vrine, old and cold, with the iuice of varuen, and the iuice of wormes, of eche like quantitie, then stir it well altogether, and so quenche your mettals therin, so far as you will haue it hard, then let it coole softlie of it selfe til ye see spots like gold rise theron, then take it out of the said water, and they wil be will.

To set a colour or vernish on yron.

To vernish yron or steele, take the gall of a Calfe and (your yron and steele being cleane vernished) strike with a cloth your gall theron, and then let it drie in the sunne, and it will shew like a gold colour.

To

To colour tinne, or coper, or to colour the buckles girdles, and such.

Take of Lynseed oyle as much as ye will, set it vpon the fire, and scymme it cleane, then put therein of Amber, and of Aloparum, in like ouer, then beate and stirre it well altogether, with the oyle ouer the fire, till it wax thicke, then take it from the fire and coner it close, then set it in the earth three dates, and when yee will to occupie thereof, strike your mettall all ouer therewith, and so let it drie as aforesaid in the sunne, and so you shall haue a golden colour.

How to gild vpon yron or steele.

Take a quantitie of wyne stone, with as much Salarmoniac, and like of Uerdigreace, and some salt, then seeth altogether in white wine, then strike all ouer your burnished yron or steele, and let in burne in the sunne as before, and you may gild thereon with common gold as the ouer is, and so it will be faire and good.

To gild yron with a water.

Take of water or running water, for three pound of water, take two ounce of Rock allum, and an ounce of vitriol Romaine, and a peny waight of verdigreace, of salgemma three ounces, one ounce of Dyement, then boyle all these together, and when it begins to boyle, put in some tyes of tartar and bay salt, of euery halfe an ounce, make it seeth, and being for a prette while, take it from the fyre, and then strike your yron therewith, then let it drie against the fire, and being drie burnish it, and it will be faire.

To gild on yron another way.

Take foure ounces of oyle lyne, of Tartre or wine lyes, two ounces, and two ounces of the yeolkes of harde rosted egges stampt, of Alio Licotrinum one ounce, a quarter of a dragm of saffron, then boile all these in an earthen potte a good space, & if the oile of linseed couer not al the substance, put therto sufficient of water, then annoint your burnished yron therewith, and it will shew as the colour of golde.

To cast a siluer colour on copper for buckles of harnes and such like.

Take of wine stone, of allum, and of salt of eche like quantitie, then grind them altogether on a painters stone, and put therevnto a leafe or two of siluer, and so grinde it well with the rest of your stuffe, so done, then put it in a leaded pot of earth, and therein put your copper a little while, so done, then scrape it with your wiar brush, then yee shall see if it will be well, if not, let it remaine ther in long, and so will it be faire.

To gild on yron as goldsmiths do, with quicksiluer, and gold foile.

Take vitriol 1 ounce, allum 2 ounces, salarmoniac 1 ounce, then beat these into poulder, and boile it in common water, then take your burnished yron, and all to weat it with the said water, so then lay your goldfoile theron, and dry it against the fyre, then burnish it as men do, & so it will looke faire, but if ye will gild with golde mixt with quicksiluer, as goldsmiths do, ye shal put in a dragme of vervigreace, with halfe ounce of Sublimatum, so boile them together, & let your yron boyle in the same water, but being so great

ye

ye cannot then cub it there with, yhoat it to receive better the colour, with quicksilver and gold, and when ye haue so heated yoat yron, ye may gild with the same gold so mixt, and then sinne it with a fyre lampe, or brimstone, or wax.

A good way to burnish yron.

Take an ounce of Alopaticum citrinum, an ounce of Amber, then mix and beat them together into a poulder, then set it ouer the fire of coles in a earthen pot, and make it not to hote at the first, but when it is molten put thereunto a quantitie of seething oyle, and stur it al well togither with a sticke, then let it rest, take it from the fire and coole, and so keepe it, and with this ye may vernish at pleasure, as ye do other mettals.

To sowder on cold yron.

Take two ounces of Salarmoniac, two ounces of salte, two ounce of winestone made in poulder, 2 ounces of clocke spice, so cald in dutch, six ounces of looking glasse, beate all these, and mingle them well together, then put them in a linnen cloth, & lay it round, a finger thick with good clay which clay must be wel tempered. Then put them in a leaded pot of earth, and couer it with another like pot of earth then set it softly on glowing coles, so let it softlye warme, and by little and litle increase your heat, till the said stuffe be al glowing hote and run, so done, then let it coole from the fyre, then take it foorth and breake it small, and so grinde it to a fyne poulder, and when yee will sowder any yron, yee muste make it fast on a boord, and see that the ioynts bee sette close together as yee canne, and first lay a paper vnder your yron, and put of the said pouder a little betwixt the said ioints, and also vpon all the ioynts, then wrappe it all rounde with claye, sauing aboue,

 which

which yee shall leaue open to sowder at, then take of the poulder of Burras, and put it in wine luke warme, or Aquauite, and so let it melt therein, so done, take of the same wine, and with a feather strike on the ioints aboue which be vncouered, then it will begin to seeth, so when it leaueth seething, it is then whole sowdred and sound, then being so take of your clay, and such roughnesse as doeth remaine on the ioynts, which ye shall not fyle of, but geind it of, and thus it shall be well.

Another waie to sowder warme on yron or steele.

Take of gum water, and beate therewith some hearbes, which hearbs it shall not skill what, and make it as thicke as a past, and when ye will sowder any place, strike theron, or lay it on the ioint, then rubbe it thereon with sope, and then holde thereto a fyre cole, and it will runne. Then wash of the said dough from the sowdred place, and so it will be faire.

How to sowder on Copper.

Take an ounce of Coperas, halfe an ounce of white Arsenic, which is called white Orpement, then make your Copper to runne, and diuide your Arsenicke into two parts, then cast one part into your copper, and stirre it wel all together, and then cast in the other parte of your Arsenicke to your coper, and stir it wel altogether, so done, cast it on a stone, and spread it thin, and when it is cold, beate it into a fyne poulder, and vse it likewise as the other before mentioned.

For to sowder on Lattin.

You must fyle your Lattin cleane all ouer, then put the

ioints close together, and then scrape quickly your bur-
ras, so ye shall see it well and sure sowdred.

Another sowder to sowder on yron.

Ye shall set your ioints of yron as close as yee may the
one vnto the other, then lay them in a glowing cole, and
then take of Armis glasse made in fine poulder, and pour y-
ron being redde hote in the fyre, cast the poulder of your
glasse thereon, and so it shall sowder of himselfe, and be ve-
ry strong withall. And if ye clap it in clay as afore said, you
shall not doe amisse.

Another good way to gild on yron
or Steele.

Take one ounce of Dzgall, or Dzgyzs, in Dutch so na-
med, with a third part of Vermilion, and a fourth part of
Sol armoniac, with as much of Aquavite, then wash and
grinde them altogether on a stone with Lynseed oyle, as
done, put thereunto some of the stone called Lapis Calami-
naris, the bignesse of a hazell nut, and grind therwith in the
end, three or foure drops of Vernish, so take it off the stone,
and straine it thorow a linnen cloth into a stone pot, for it
must be as thicke as honie, so keepe it, and strike it where on
ye list, and so let it drie, and then ye may lay your golde or
silver thereon, as afore said.

A Varnish like gold, for tinne, silver or buckles
of copper.

Ye shall haue small pots well leaded, then put therein fiue
ounces of Linseed oyle, one ounce of Mastick, an ounce of
Aloepaticum citrium, then make them altogether in fine
poulder, and then put them into your said oile, and couer it

with sitch another pot, which pot aboue yee shall make a small hole in the bottome thereof, wherein ye shall put thorow a small sticke, with a brode ende beneath, to sturre the other pot withall, and when the pots are set iust togither, one to the other, ye shal close them al about with good clay and touer them all ouer also, in leauing but the hole open aboue, with the sticke to stir the other pot, so done, set them ouer the fire, in stirring it oft, as it doth seeth, like painters vernish, and when ye will gild therewith, poollishe your mettall fyrst all ouer, and then strike the vernish all ouer thereon, and then let it drie in the sunne, if it lie too thinne, strike it ouer againe so often as ye shall thinke good, and so let it drie betwixt your striking, and then ye shall see it wil do well.

A way to graue on yron or steele, or other kind of weapons.

Take cole of a willo or sallo, two parts of Vitrioll or coparas, two parts of Salarmoniac, worke and beate all these together well with Vineger, and make it thicke like broth, and when ye will eat or graue any thing withall, draw first thereon with this thing following. Take Vermilion, and linseed oile mixt all together, then drie it & lay it ouer with your past a finger thick or more, and the warmer it is, the sooner it will graue and eat, but see too it, it burne not, and when it is dryde well, doe off the sayde poulder, and cleanse the casting out, then take two parts of spanish greene, cald verdigreace, and a part of salt, then beat them together in a morter, and put vnto it strong vineger, and do as it is abouesaid, or take Vitrioll, Allum, salt, Lapis calaminaris, viniger, and sallo cole, and make it as the other aforesaid, or take two parts of Vitriol, and a third part of salarmoniac, and grind them well altogether on a stone with vrine or pisse, then lay it on as it is aforesayd

faide, put ye must lay it cold on, and set it then foure or fiue howers in a seller, or low coole place, for it will bee the better.

A water to eat or graue on yron or steele.

Take of verdigreace, of Mercury sublyme, of vitriol, & of Allum, of ech alike, then beat them small, & so put it into a glasse, so let it stand halfe a daie, and stir it often, then strike it all ouer with wax or yealow lead, mixt with linseed oile, or liisen smout, so cald in dutch, and strike thereon with the water in the glasse, & let it stand halfe a day, but if ye write or lay thin that the water may eat it the sooner, which ye shal couer al the yron and steele thin with wax, and to draw thereon what ye list with a pensill in the wax, to the groũd, then strike your water all ouer, and so it shall eate on your grauen places, or lay theron Mercury sublimatum in your grauen places, and put therevnto vineger, and so let it rest halfe an houre after, and it will do well.

Another water to eat on yron or steele
more stronger.

Take an ounce of Verdigreace, halfe an ounce of Allum Plumosum, and halfe an ounce of Salarmoniac, as muche of winestone, and halfe an ounce of Vitriol, and as much of common salt, let all be small beaten, & so put together, and put thereto of sharpe vineger, & so let it stand an houre, and when to graue or eat anie thing therewith, it must be first grauen, & ye shal write with liisen smout, or yelow colour then let it drie, and then make your foresaid water hote in a leaded panne, and let it stande ouer the fyre, and hold your yron and steele ouer the panne, and poure of that hote water thereon with a ladle, that the rest maye fall agayne into the foresaid panne, thus must you doe still a good

quarter

quarter of an houre, & this doing, then take ashes or vnslect lyme and rub it, & looke of that ye would haue eaten, if it be cleane or not, if not, draw it again with your yelo matter, & then poure on your said water, and so ye shall haue it well.

To lay gold vpon yron or other mettall.

Take of liquid varnish i.li. of Turpentine and oile of Linseed of ech i. ounce, then mix them wel altogether, and so reserue it, on this ground ye may gild vpon any mettall.

Another way to gild on yron.

Take of bolearmoniac, & white gum, of ech one ounce, thē put it into a pot of earth well leaded, & let it seeth therin softlie with a fyre of coles, and put therin two ounces of Linseed oile, and when it doth rope like a thread, it is then a signe it is ynough sod, with which ye may vse to gild, as is afore declared, by these and such practises in mettals, ye may find out the like of other hereafter.

A way to eat on mettals.

Take an ounce of Saltpeter, an ounce of coperas, beat them together and put them into a double glasse, and distill a water thereof, then take yelow or red wax, and spread it thin as paper, on what mettall ye will, or weapon, then draw thereon to the ground with a pensil of steele or other, then all to strike it ouer the drawne places with the sayde water distild, so let it remaine xxiiii. houres, which water will eat on your yron or steele sufficiently. The like way ye may doe with other sort of mettals.

Finis.

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